Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—The syllabus of this course will show more in detail what are the subjects treated of, but it may perhaps be convenient to enumerate succinctly the main propositions which, in the limited time allotted to me, I shall endeavour to establish. They are as follows:—

1. The superiority of the modern method of ligature, with catgut, cut short and buried in the wound, does not preclude the employment of compression.

2. There are forms of carotid aneurism easily curable by compression, and the compression of the carotid artery, though difficult and painful at first, may often be rendered successful by perseverance both on the part of the surgeon and the patient. For these reasons the ligature of the carotid, which has hitherto been a very fatal operation, ought as far as possible to be avoided.

3. When the ligature of the carotid becomes necessary, it may often be advisable to evacuate the contents of the sac, and secure the distal end of the artery.

4. Brasdor's operation on the carotid artery, though very rarely indicated, yet rests on sound anatomical and surgical principles.

5. Traumatic aneurisms and wounds of the vertebral artery are often confounded with lesions of the carotid, but such injuries ought to be diagnosed from those of the carotid, and may very probably be successfully treated by compression, or by the old operation.

6. Under the term "orbital aneurism" appear to be comprised several different affections. Some of these lesions seem to be spontaneously curable, or to have little tendency to a fatal result, and the others are very probably often curable by milder measures than ligature of the carotid, which should therefore be avoided in this disease as long as possible.

7. It is possible that, in rare cases, intra-cranial aneurism may be diagnosed and successfully treated.

8. Arterio-venous aneurism in the neck is usually, but not always, harmless.

9. There are many cases of axillary aneurism which are curable by compression, and many instances of cure by this method are already known. Ligature of the subclavian, on the other hand, is a very deadly operation, and the more so the higher the aneurism extends.

10. Though Mr. Syme appears to have been in error in speaking of the old operation as being generally preferable to the Hunterian ligature in axillary aneurism, yet there are cases of disease and, more rarely, of aneurism of that artery in which a surgeon may be justified in preferring it; having always before his mind, however, the possible necessity of amputation.

11. Manipulation, or some other mode of local treatment, may possibly be successful in some cases of axillary aneurism; but there is no trustworthy experience on this head at present.

12. Brachial aneurism, traumatic or spontaneous, as also similar aneurisms below the bend of the elbow, may be usually treated with success—in the absence of heart-disease; which, however, often complicates the spontaneous form.

13. Arterio-venous aneurism at the bend of the elbow is now commonly made amenable to digital compression, properly applied.

The main question in the modern surgery of aneurism is, how far it is possible to substitute the treatment by compression in one or other of its forms for the surgical operations which we now know to have proved so fatal in practice. This is a question which can only very imperfectly be answered by statistics, since the success of the compression treatment depends on many other things besides the nature of the case—on the presence of a sufficient number of assistants, on the constant vigilance of the surgeon, on the proper instruction of the assistants, on the constant supervision of the compressing agent, &c. Thus a large percentage of failures in hospital practice may mean, not so much that pressure is an inefficient method as that the same care is not expended on it as would have been bestowed on a cutting operation. Still it will be of much value to know what has in fact been done in this way at our hospitals. I have accordingly addressed questions to the various chief hospitals in the United Kingdom, and have received answers from more than thirty of them, embodying all the recorded experience of the surgical treatment of external aneurism during the last ten years—337 cases in all. My best thanks are due to those gentlemen who at each hospital found time among their other arduous duties to undertake this labour for me. In speaking of each form of aneurism I shall refer to the data in this table to show the relative prevalence of each, the treatment which has been adopted, and the success which has attended it. The table is not statistically accurate, since it does not contain all the cases which have occurred in each city, nor always at each hospital; but it does contain, what is equally valuable for our purpose, a large list of cases taken indiscriminately—i. e., with no selection or rejection of unusual or interesting cases.

The frequency of the failure of compression in the treatment of aneurism leads me back to another question which I treated in my lectures last year. I mean the comparative safety of using the carbolised catgut ligature in tying arteries. Some surgeons are so impressed with the advantage of this mode of operating that they believe the ligature of the artery on this principle to be safe enough to supersede any necessity for attempting to treat the case by compression. I cannot for a moment share this view, and I hope that nothing I may have said last year has lent any colour to it. If I may be pardoned for quoting myself, I will read some of the observations which I then made as to the probable superiority of this over the old method of ligature.* "This case (one in which I showed the subclavian and carotid arteries in the human subject eight weeks after their successful ligature with carbolised gut) affords definite anatomical proof that it is possible to tie a large artery in the human subject in such a manner that the wound may unite by first intention, and the patient never be in any danger of secondary hæmorrhage. And it shows further that the catgut ligature may be removed by absorption, the vessel remaining undivided.....But I do not imagine that catgut or any other ligature can be applied to an artery with perfect success, by which I mean so as to close its tube, yet not interrupt its continuity, unless the artery itself is kept as much as possible free from inflammation—that is, unless the tissues around become rapidly coagulated by first intention. An artery exposed in the middle of a suppurating cavity will, I believe, always soften and give way." And in another lecture† I say that "much more experience is required before we can regard the ligature of arteries without their subsequent ulceration as a result to be uniformly reckoned on." In fact, I think anyone who will do me the favour of reading what I then said as to the catgut ligature cannot fail to see that I attributed the immunity from secondary hæmorrhage—which to a certain extent we have attained by this method, and which I hope we shall secure much more uniformly in future—quite as much to the rapid union of the tissues, which support and nourish the artery, as to the mere use of the material. It is true that the possibility of this rapid union depends on the non-irritating character of the material, and on its soluble nature.

I can now refer to other cases also to show the reality of union after ligature of an artery without any division of its external coat. Two such cases will be found recorded in the *British Medical Journal*, Sept. 24th, 1870, by Dr. Gibb, of Newcastle, and in THE LANCET, Jan. 4th, 1873, by Mr. Jessop, of Leeds; and another of still greater interest is recorded by Dr. Ebenezer Watson, of Glasgow, in the

* THE LANCET, Sept. 7th, 1872, p. 325.
† THE LANCET, Nov. 16th, 1872, p. 693.

Glasgow Medical Journal, May, 1870. But other cases which have come to our knowledge since last year prove that this method of ligature is not without its drawbacks. Thus Mr. Holden has published a case* in which the femoral artery was tied with carbolised catgut. Slight pulsation was noticed in the aneurism on the following day, and became "considerable" the day after; the wound suppurated acutely, and on the eighth day after the operation an attack of bleeding took place, which proved instantly fatal. On post-mortem examination, no trace could be found of the ligature, the aneurism was found to have burst, and there was a small jagged perforation in the artery at the seat of the ligature through which the hæmorrhage had taken place. No description is given of the state of the artery beyond this—that the two internal coats had been fairly divided by the ligature, and that there was no clot in the vessel. And I have heard of another case in which a carbolised catgut ligature softened, and allowed the recurrence of pulsation.

Now, I know that it is quite possible to suggest plausible reasons for the failure in the above cases (and in similar cases which have, doubtless, occurred) without impugning the method employed. In Mr. Holden's case, where the artery gave way, it is very probable that its coats may have been brittle, and that a small crack or rent—such as I showed last year in the carotid artery which I exhibited†—may have been caused by the mere act of tying the vessel. In my case rapid consolidation took place around the artery, and this little crack did no harm. In Mr. Holden's, as suppuration went on, the tissues of the vessel softened, and it gave way. The same thing would, as a matter of course, have occurred with the silk ligature. And, in both the cases of failure above referred to, the premature relaxation of the ligature, by which the pulsation was allowed to recommence, may have been due to some accidental error in the preparation, or even in the tying of the catgut. But without discussing the sufficiency of such explanations, I prefer to take cases of this kind as showing that the ligature of arteries with carbolised catgut, whatever precautions we may adopt in order to ensure rapid union, is exposed to the same risks of failure as beset every other surgical procedure which we know of. This does not, to my mind, invalidate the conclusion that it is by far the best method of tying an artery which has been as yet invented, since it holds out a prospect of union by the first intention, and with no liability to secondary hæmorrhage, which is utterly impossible under the common method of ligature with a silken thread. Anatomical proof has been obtained, in the cases cited above (and very probably in others), that this object has been successfully achieved; and the successful issue of many other cases, in which union of the wound has been obtained either by the first intention or in a much shorter time than would be possible if the artery had to be divided by ulceration, renders it certain that the same is the usual result after this method of ligature. The occasional occurrence of secondary hæmorrhage, or of premature relaxation of the constriction, is an argument, not for renouncing a proved advance in this department of surgery, but for endeavouring to acquire such familiarity with the details of the process as shall reduce the number of unsuccessful cases to the minimum.

It is, however, a long step from this to the other extreme, which teaches that a patient is safer with this form of ligature than under the trial of compression. I will say nothing of the anatomical dangers of the dissection necessary to expose most of the great arteries, except that these are not to be despised, and the recorded experience of surgery affords proof enough of their reality, which most likely many of us could reinforce from experience which has not been recorded. But we all know well enough the host of dangers which surround the patient after the ligature of a great artery, however successfully it may have been carried out, until the wound is finally healed and the aneurism definitely consolidated. Only a part of these dangers depend on the ulceration of the vessel; so that, even if such ulceration could be absolutely certainly obviated, the patient would still remain exposed to some risk (it may be less risk, but certainly some) of gangrene, pyæmia, suppuration of the sac, and all the other sequelæ of cutting operations, from which he is entirely free so long as there is a prospect of cure by compression.

Perhaps, however, I may have, in your judgment, spent too long a time in proving what I should have thought, but for the eminence of some surgeons who teach and act differently, a truism—that the ligature should be avoided in any form of aneurism in which there is a fair prospect of cure without operation.

I pass now to the first form of aneurism on my list, that of the common carotid.

It is the general opinion that carotid aneurism is most commonly situated near the bifurcation of the artery; and this opinion is probably correct, judging from the specimens which are to be found in our museums, as well as from the description of recorded cases. Any part, however, of the artery may give way in cases of disease, and any part may be the seat of injury, though the more superficial position of the upper part of the vessel renders traumatic aneurism also more common at that level.

I shall commence what I have to say with regard to the treatment of aneurism of the common carotid artery by calling your attention to three examples of it which I select as illustrative of the applicability of the three main resources of surgery in its treatment.

The first is a preparation in our own museum, No. 1685. It shows the extreme ease with which the disease might, in all probability, have been cured by pressure, since the interruption, even for a short time, of the current into the upper part of the sac—which is alone unobliterated—would, we can hardly doubt, have been followed by the completion of the process which has already advanced so far. Nor is it by any means improbable that a portion of the looser lamine of clot at the upper part of the sac might have become accidentally detached and impacted in the mouth of the aneurism, and a spontaneous cure thus produced. Instances have been known of the cure of carotid aneurism either spontaneously or at any rate without surgical interference. Thus in the *Gazette des Hôpitaux*, 1867, p. 508, there is the history of a case in which there is every reason to believe that the man had had a carotid aneurism which had got well under the starving treatment. Here, however, it must be allowed that room exists for doubt, as the medical history of the case during the period of treatment is not given. But no such objection applied to a case related by Dr. S. C. Sewall in the *Canada Medical Journal*, Oct. 1864.*

The second illustration of carotid aneurism is taken from Scarpa's great work. It shows the anterior aspect of a large tumour springing from the left common carotid artery by a rounded orifice of comparatively small size, which cannot have been much above the root of the neck. The internal coats of the artery are seen in the diagram to be distinguishable for some little distance around the orifice. The tumour has grown to an enormous size, so that it more than fills the interspace between the two carotids, and must have much displaced the trachea and œsophagus, and it extends upwards beyond the bifurcation of the artery. In this condition the disease was probably altogether incurable; but there must have been a previous stage, when treatment might have been applied with a prospect of success. The artery below the tumour would probably have been always inaccessible, or only accessible by one of the most dangerous of all the operations of surgery; but when the tumour was smaller the trunk of the carotid beyond the aneurism might have been commanded. If distal pressure stopped or very materially checked the pulsation, as I think it must, the disease might have been treated by distal compression on the upper part of the artery. If this treatment failed, there would be the best hope of success by Brasdor's operation.

The third illustration is taken from a preparation in St. George's Hospital Museum, which I exhibited and the history of which I quoted in my lectures last year.† It shows a large sac, formed out of the cellular tissue, communicating with the common carotid artery by a very minute orifice near its bifurcation, in the neighbourhood of which are two or three little patches of atheroma. The symptoms came on very suddenly, and the pulsation appeared and disappeared with the formation or rupture of the sac. Ligature of the artery was not performed, and

* St. Bartholomew's Hospital Reports, vol. viii., p. 197.
† THE LANCET, July 20th, 1872, p. 70.

* Quoted by the American Journal of Medical Science, Oct. 1865, p. 535.
† THE LANCET, March 1st, 1873, p. 295.

the patient died from pressure on the larynx and pharynx. Along with this may be taken the history of a somewhat similar case recorded by M. Decès in the "Bull. de la Soc. de Chir." for 1856, vol. vi., p. 537, where the aneurism was caused by the woman's husband grasping her by the throat. The artery was tied, and the patient recovered, though very slowly, pulsation being long perceptible in the tumour. In tumours which are so large and of such rapid growth as these compression seems to me hardly applicable, and no time should be lost in tying the diseased or injured artery.

Aneurism, again, or I should perhaps rather say aneurismal dilatation, occurs not unfrequently at the root of the carotid in the neck (usually, if not always, on the right side) merely as a feature in that general dilatation of the great arteries near the heart, on which I remarked in a former lecture at this College as not involving any such dangers as true aneurism does. I have seen several cases of this, in which the patient had been in a state of tolerable health and comfort for a long while, and the disease appeared to be making no advance whatever. A case somewhat of this kind was exhibited by Mr. Coulson to an early meeting of the Pathological Society.* In this case, Mr. Coulson says that the patient, a female, died from natural decay at the age of eighty-eight; that she had had for some years a pulsating tumour, which was considered to be aneurismal, just above the right clavicle, but that on dissection this apparent aneurism was found to consist of a reduplication of the common carotid artery, and of indurated cellular tissue around it. The vessels arising from the aorta were elongated and considerably dilated, and there was advanced atheromatous degeneration.

A case, apparently of this kind, in which the enlargement seemed to be due more to folding of a rigid artery on itself than to enlargement of its calibre, was shown to me some time ago at St. George's Hospital by my colleague, Mr. Pollock, but I am not aware that any opportunity ever occurred for demonstrating the real condition of the vessel. And I have no doubt that most surgeons have had opportunities of watching cases in which the root of the carotid has been sufficiently dilated to give at first sight the appearance of aneurismal pulsation, but where every other sign of aneurism has been absent, and where the patient has continued for years without any striking change in the part, and without suffering any grave inconvenience. Such cases occur always, I think, beyond the middle of life, and usually in old age.

Any part of the artery between the root of the neck and its bifurcation may be the seat of aneurism. This beautiful preparation (No. 1686) from our museum shows a very large aneurism springing from the common carotid about an inch below its bifurcation, projecting into the pharynx, and reaching up nearly to the base of the skull.

Another situation for carotid aneurism has been imagined—namely, of the thoracic portion of the left carotid artery; having its mouth, as we may suppose, between the arch of the aorta and the sterno-clavicular articulation. I am not aware that any preparation of an aneurism in this precise situation has as yet been put on record. The question is an important one, as bearing on Brasdor's operation, whether an aneurism can be met with springing from the left carotid in this part, and not affecting the aorta. The case which Mr. Lane† operated upon was believed to be of this nature, but, as I mentioned last year, the description given of the case after death shows that it opened out of the aorta; and this, I suspect, is usually if not always the case. At the same time, the analogy of Scarpa's case, which I have had drawn, prevents us from denying the possibility of the occurrence of a carotid aneurism in the thorax; since no valid reason can be alleged why the carotid in this instance might not have given way an inch lower down.

Carotid aneurism is believed to be a very rare disease. It does, however, occur often enough to make its treatment a matter of considerable importance to every practical surgeon; and I suppose few of us have passed through a tolerably extensive hospital experience without having had to treat, or at any rate to watch, a case of the kind.

In my list of various aneurisms in British hospitals during the last ten years—the number of which amounts to 337—the number of cases of carotid aneurism is 12. In one of these cases the aneurism affected the external carotid. It was of the traumatic form. In all the rest the common carotid seems to have been affected, and all were spontaneous except one. Three of the patients were females; the rest males.

It is interesting to notice the treatment in these twelve cases and its results, or rather, I should say, in eleven cases, for one of the patients (a woman aged forty) was discharged unrelieved, no treatment being attempted. In nine cases the common carotid was tied, of which five died; and in a sixth, though the ligature separated, and the wound had healed, the cure was by no means complete when the patient died, not long after the fall of the ligature, from visceral disease. In the tenth case the common carotid was tied for a traumatic aneurism of the external carotid, following on a suicidal wound, but the wound gave way, and hæmorrhage recurred. The ends of the wounded vessel were then secured, but the patient died of bleeding. The eleventh case is interesting as being, so far as I know, the only successful case of instrumental compression for carotid aneurism which has as yet occurred in England. The patient was in Addenbrooke's Hospital, Cambridge, under Professor Humphry's care.

The causes of carotid aneurism are often obscure. It may originate directly from violence, as in Decès' case, in which a woman suffered from carotid aneurism in consequence of her having been seized by the throat; or it may come on sooner or later after an accident, in which the connexion between the injury and the disease is to a greater or less extent doubtful. This was the case in the instance, to which I shall refer, of a London merchant, a patient of Mr. Coulson and Mr. Gay, in whom the aneurism formed a fortnight after a railway accident, though the patient did not notice any injury to the part at the time. It may take place from the sudden rupture of an atheromatous portion of the vessel, as in the case from St. George's Hospital; or it may originate gradually, and without any proved degeneration of the arterial coats.

The apparent cause of the disease and the progress of the tumour must be taken into account in forming our plans for its treatment. Where the cause is sufficient to account for the giving way of even a healthy artery, as from direct wound, or considerable limited violence, there we could operate without much apprehension of disease of the vessel. Where, on the other hand, the cause is obscure, it is certainly prudent to avoid, if possible, any cutting operation, and persevering attempts should be made to render the case amenable to pressure.

Again, in a tumour which forms and increases slowly, there is less hurry in carrying out the measures intended to stay its progress. In one, on the contrary (like the instance from St. George's Hospital), where the disease makes its appearance rapidly, and rapidly increases to a great size, no delay should be tolerated in securing the vessel.

The methods of treatment which are most usually applicable in carotid aneurism are, compression below the tumour, proximal ligature, and distal ligature. Distal compression is a plan eminently worthy of trial in small aneurisms situated low down in the neck, but I cannot at present refer to any case in which it has been carried out alone, though I shall presently quote one in which it was used as an auxiliary to proximal pressure. But in cases such as those which we read of in Wardrop's work, where an aneurism, thought to be carotid, is situate so low in the neck as to leave a considerable portion of the common carotid accessible above it, the surgeon ought undoubtedly to test the effect of pressure applied on the distal side of the tumour. If this does not materially stop its pulsations, the suspicion that the carotid is either not involved at all (for many of these cases are aortic), or that at least it is not alone involved, becomes very strong. If, on the other hand, a small aneurism (such as that shown in our Hunterian preparation at the bifurcation of the carotid) exists near its commencement, I should undoubtedly expect that distal pressure would almost if not entirely stop its pulsation, and that, if tolerated by the patient, it would effect a cure.

Again, it may perhaps be right to add direct compression to our list of remedies in carotid aneurism, since Signor Ciniselli has put on record a case* in which this method was used with success. The aneurism was traumatic, and

* Pathological Transactions, vol. iii., p. 302.
† Cooper's Surgical Dictionary, last edition, vol. i., p. 215.

* Annali Univ. di Med., vol. cxcix., p. 351.

the pulsation gradually disappeared in 97 days. Pressure was made on it by bandaging a piece of soft sponge over the tumour. In this case digital pressure had been used for three weeks without success, and it had been seriously contemplated to tie the artery. But as after twelve days of direct compression the patient's condition had much improved, it was decided to persevere, and success was ultimately obtained. The man was seen a year afterwards in perfect health, having in the interval passed through a severe attack of small-pox. The only trace of the disease was a small indurated mass in close contact with the bifurcation of the carotid.

In the same paper Sig. Ciniselli also refers to a case* of cure of traumatic aneurism at the root of the left carotid of the size of an orange, in which direct compression was made on the tumour by means of the bottom of a tumbler filled with ice. Here, however, internal regimen calculated to diminish the heart's action was employed, which was not the case in Sig. Ciniselli's patient.

But though we may allow that distal compression, or direct pressure, may be employed occasionally in cases of carotid aneurism, and that in some very rare cases the opening of the sac may be attempted, it remains generally true that the three methods above-named are those which will usually present themselves to the mind of the surgeon, and that a fair appreciation of those methods would fulfil the scope of these lectures.

The application of effectual pressure to the carotid artery is by no means an easy task. It makes a great demand on the ingenuity and patience of the surgeon, and a still greater on the endurance and confidence of the patient. Its early application is usually accompanied with very unpleasant cerebral symptoms; and even when the patient has overcome the disposition to faintness caused in most persons by complete compression of the artery, he must suffer more or less, according to the irritability of his tissues, from the severity of the pressure necessary to command so deep a vessel lying under such delicate skin as that of the neck. All this is true even when the artery is compressed for the cure of aneurism in the orbit or cranium, and when the surgeon has the whole neck free, so that he can vary the point of pressure, and is not interfered with by the projection of a tumour, or any displacement of the artery. It is clear that these additional difficulties must further complicate the case when the aneurism is seated on the common carotid itself. Yet the fact remains that out of a very limited number of cases in which (as far as is known), compression has been attempted in the treatment of carotid aneurism, whether spontaneous or traumatic, a large proportion have been brought to a successful issue.

The pressure may be applied in various ways. Instrumental pressure can be made by means of a frame adapted to the patient's shoulders and neck, and bearing an arm on which a tourniquet pad is mounted; the direction being managed by rack-and-pinion movements, and the pressure regulated by a screw. In the case just noticed at Addenbrooke's Hospital, there was room to apply a pad on either side of the aneurism. The patient was a lad, aged seventeen; the aneurism traumatic. Pressure was made first on the distal and afterwards on the proximal side of the tumour. It was frequently intermitted during the first fortnight on account of the pain it occasioned; but the tumour diminished in size and pulsation and became more solid. During the next fortnight pressure was applied constantly on both sides simultaneously, and the tumour rapidly lessened in size, and pulsation ceased. He was discharged eight weeks after admission, with the tumour consolidated, no larger than a hazle-nut, and the calibre of the artery apparently undiminished.

But digital pressure is, on the whole, more applicable in the neck than instrumental, and this is particularly the case if the tumour extends low down, since the finger can be insinuated between it and the clavicle in a way which would be quite impossible with the pad of a tourniquet. The compressor devised by my friend Mr. Coles will also often be found very useful as replacing the finger. It occupies little if any more room than the finger. Its direction can be varied at pleasure; it requires far less muscular exertion than digital compression, and the hand or the person compressing can be changed at pleasure with no fear of releasing the artery. But then the pad is, of course, more irritating to the skin than the finger-end, and it is only capable of making pressure directly backwards, so as to press the vessel against the spine. Now, it has sometimes been found that in cases where this direct backward pressure has been intolerable a different manœuvre has succeeded. This was so in an interesting case which has been put on record by M. Rouge, of Lausanne.* The patient was a powerful man, and the aneurism of large size, situated apparently at the bifurcation of the right carotid artery. Direct compression against the vertebræ was found so painful that he refused to persevere with it, although he was very courageous and patient under the new form of pressure, which is thus described:—"The artery was seized between the thumb of the left hand placed in front of it, and two or three fingers slipped behind it, thus isolating it from the jugular vein and pneumogastric. This manœuvre soon became familiar and easy to the assistants. Each assistant made pressure for a quarter of an hour. If the hand was changed he could go on for a little longer, and it was found that pressing the fingers of the compressing hand with those of the other relieved the pain in the former." The whole work was successfully carried through in this case by five assistants, two of them acquainted with medicine, the others male nurses in the hospital.

In my next lecture I shall conclude the subject of the treatment of carotid aneurism by compression and otherwise.

* Reported by Souchier d'Allex in the Transactions of the Medical Society of Marseilles, and quoted in the "Annali Univ.," vol. xcvi., 1840.

ABSTRACT OF

Lectures

ON

VARIETIES IN THE MUSCLES OF MAN.

Delivered at the Royal College of Surgeons in June, 1873,

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OF CAMBRIDGE.

LECTURE I.

In the three lectures on Myology which Professor Humphry delivered last year at the Royal College of Surgeons, he showed that the several muscles in man are modifications of the simple pattern which is found in the lower animals. In the present course of lectures he proposed to show that the *varieties* in the muscles are to be viewed in the same light, and that they are generally the result of an imperfection in those processes of segmentation from the simple type and of concentration by which the more complete specialisation of the several parts of the muscular system in man is obtained. These varieties, as well as the modifications of which they are varieties, have a relation to utility in this way: taking the normal standard of muscular disposition as the most perfect, and therefore the most constant, those variations from it are the most frequent which least interfere with the movements of the body. Those muscles, that is to say, are the most frequently wanting or liable to variety which can be best spared and the variations in which are least detrimental—such as the pyramidalis abdominis, the palmaris longus, and the psoas parvus.

The principle of subdivision or segmentation of muscles for the purpose of varied action, and that of concentration upon particular points for the purpose of definiteness of action, is carried to its greatest extent in man, particularly in the limbs, and especially in the upper limb; and it is in these parts that varieties most frequently occur. They are also most frequent in the case of muscles which lie parallel and which have similar action, as the radial extensors of the wrist, which are often united; whereas this is not the case with the peronei, which pass to different parts and have different actions.

The imperfection in concentration was illustrated by the extension of the coraco-brachialis upon the humerus, as in the case of many lower animals; also by the presence of supernumerary muscles, as in the case of an additional coraco-brachialis, such muscles being usually adjuncts to, or reduplications of, ordinary muscles.

* Bull. de la Soc. de Chir., 1866, p. 496.

With regard to correlation of varieties, the lecturer observed that several are often present in the same subject, and they are often associated with varieties in other structures; and the same kind of variety is often repeated in the same person. They are also often symmetrical; but the corresponding varieties are not commonly found in the upper and lower limbs—that is, the serially homologous muscles are not usually affected in the same person. Males and females, and the two sides of the body, are equally liable to be affected; and the other races of mankind, and some of the lower animals, are, as far as the evidence goes, as liable to muscular varieties as ourselves.

The varieties are themselves very varied—that is, an additional muscle, or head of a muscle, is scarcely alike in any two instances of its occurrence. There are, however, certain lines or directions, as they have been called; and these are often in the direction of the normal form of some lower animal, chiefly of those nearest to man, also not unfrequently of those remote from him in the animal scale. This the lecturer regarded as an illustration of the similarity of the forces which are in operation in the evolution of the several animals, and not necessarily as an evidence that the one has been evolved from the others, and that the varieties are therefore to be regarded in the light of reversions to the form of some other animal or animals.

The muscles of the abdomen were first considered. The varieties in most of these were described as few and unfrequent, which accords with the simple disposition of these muscles and the little variation they present in the different classes of animals. In the obliqui and transversalis they are almost limited to the occasional persistence of inscriptions over the ribs or the costal cartilages. The most frequent varieties are in the two muscles which are most easily spared—viz., the pyramidalis and the psoas parvus. These are often absent. Yet one of them, the psoas parvus, is very generally present in mammals, while the other is more frequently absent. In the rectus also the varieties are few. In the lower mammals this muscle is often prolonged upon the thorax as far as the first rib. This is not the case even as a variety in man. Still, a muscle not continuous with the rectus, but in other respects resembling this continuation of the rectus, and forming what the lecturer called the "rectus thoracicus profundus," is sometimes found beneath the pectoral muscles. It is to be distinguished from the rectus "thoracicus superficialis," also called "sternalis," which lies upon the surface of the pectoralis, which is often continuous with the sterno-mastoid, and which the lecturer believed to be a partial representative of the extension of those superficial strata of the mesial portion of the abdominal wall into the sterno-mastoid which are found in lower vertebrates. It was pointed out that this last-named anomalous muscle has no representative in other mammals, birds, or higher reptiles; and it was suggested that its frequent occurrence in man may have some relation to the flatness of the front of his thorax, affording space for its development.

The muscles of the neck were next discussed. The platysma and the sterno-cleido-mastoid do not often present varieties, whereas the sterno-hyoid and sterno-thyroid and the digastricus and the stylo-hyoid are the seat of many and frequent varieties. A detailed account of these was given, and their relation to the primitive strata and to the muscles of lower animals was pointed out at length.

THE HÆMATOZOON:

NOTES ON ITS DISCOVERY AND ITS RELATION TO THE CANINE FILARIA.

BY D. D. CUNNINGHAM, M.B.

IN a recent number of THE LANCET* a paper was published by Mr. Welch, "On a Species of Filaria found in the Interior of the Vascular System of a Dog: relative to the filaria in the blood, and the ova and larvæ of a nematoid worm in the urine of man." The paper contains a careful description of the mature female, the ova and embryos of the canine filaria, and is illustrated by figures exhibiting structural details. The question of the relation of the canine and human filariæ is also discussed, and in this portion of the paper some statements are made on which I desire to make a few comments.

These statements refer (1) to the history of the discovery of filariæ in the urine; and (2) to an assumed close resemblance between the canine and human worms.

Regarding the first point, we find it recorded that, "Turning to the existence of larvæ and ova of nematoid worms in the human fluids, there is the original discovery of ova in the chylous urine made by Dr. Salisbury, and narrated in *Hay's American Journal*, 1868, p. 376. These ova were, according to Dr. Cobbold, 'about $\frac{1}{175}$" in length by $\frac{1}{375}$" in breadth; in a state of segmentation of the yelk or embryo-containing'; not far removed in size from the ova of the canine filaria, and, comparing the sketches, markedly resembling them. Dr. Cobbold also, while pursuing the natural history of the bilharzia, obtained from a patient urinary parasites in the egg condition and dead embryos, which, 'in spite of discrepancy of size,' he considers 'were identical with those of Dr. Salisbury, and referable to one and the same species of nematoid worms.' Subsequently Dr. Lewis detected microscopic filariæ in fifteen to twenty patients suffering from chyluria." Now (1) Dr. Salisbury never discovered ova in chylous urine; (2) there is every evidence that the ova and embryos in both Dr. Salisbury's and Dr. Cobbold's cases were mere accidents, and not true urinary parasites at all; and (3) even had they been so it is incorrect to state that Dr. Lewis's discovery was subsequent to Dr. Cobbold's.

In reference to the first statement it is to be presumed that the author had not an opportunity of consulting the original case, but it is somewhat astounding to find Dr. Cobbold, who "unearthed"† Salisbury's paper, confounding *cystinuria* with *chyluria*. Dr. Salisbury's description of the case is as follows:‡ "This patient was an old lady, aged about sixty-five. She had cystinic rheumatism, and was partially paralysed, and had been insane for several years. She was labouring under severe cystinemia, which were regarded as the main cause of the rheumatism and paralysis. When the patient originally came into my hands there were from five to fifteen ova in every drop of urine voided. Her urine was passed milky, with granular cystini, and was dense and scanty. There was partial paralysis of the bladder, so that her water was constantly dribbling from her." It is evident that the only phenomenon in the case in any way resembling the phenomena of chyluria was a milkiness of the urine, but a *milkiness due to granular cystine*, a material hitherto not observed in connexion with chyluria. If every case in which the urine contains whitish suspended matters is to be styled one of chyluria, the disease will be found to be much more widely diffused than it has hitherto been considered to be.

The disease in Dr. Salisbury's case being thus disposed of, we may proceed to consider the characters and probable nature of the entozoa occurring in it, as well as in Dr. Cobbold's case of bilharzia.‡ That they were totally dissimilar from those discovered by Dr. Lewis will be seen at a glance on comparing a reproduction of Dr. Salisbury's original figure (Fig. 2) with a drawing of the filaria of chylous urine equally magnified (Fig. 3). No words are needed to indicate the entire difference between the two organisms. The different nature of the two entozoa is also indicated by the fact that whilst in Drs. Salisbury's and Cobbold's cases ova and ova-contained embryos were the structures discovered, in chyluria no such bodies have been as yet detected.§ Dr. Cobbold has himself identified the entozoa in his own and Dr. Salisbury's cases, so that they may be considered together. Two very significant facts are at once encountered in regard to these cases—viz., that the same ova and embryos occurred in two very different diseases, in very different kinds of urine, and that the only common point in the two cases is that *both patients were females*.

Now it has long been on record that it is in females that intestinal entozoa, their ova and embryos, are liable to ob-

* March 8th, 1873, p. 336.

* Medical Record, No. 1, vol. i., p. 5.
† American Journal of Medical Sciences, No. cx., p. 376.
‡ British Medical Journal, July 27th, 1872, p. 89.
§ Dr. Lewis has collected and carefully examined the sediment of at least twelve gallons of chylous urine, and has frequently afforded me opportunities of examination, but in no instance have unequivocal ova been detected.

tain accidental entrance into the urine, the anatomical relations of the digestive and urinary apparatus being such as to facilitate the wandering of entozoa from the former into the latter. Such wandering has been specially observed in the case of Oxyuris vermicularis, and there is reason to suspect that the ova and embryos in the cases under discussion were merely those of this common parasite. This may appear to be a bold statement, but evidence in its support is not wanting. The measurements of the ova and embryos, when arranged in a tabular form, give the following results:—

	Ova.		Embryos.	
	Length.	Breadth.	Length.	Breadth.
Salisbury's case	1/300"	1/1200"	1/300"	—
Cobbold's case	1/300	1/1000	1/120	1/2000
Oxyuris vermicularis:				
Leuckart	1/175	1/1021	1/175	1/2500
	1/300	1/1000	—	—
Cobbold	1/300	1/1200	—	—

The above figures show a very close correspondence with one another, the variations being so slight as to be easily accounted for by variations in the media in which the ova were immersed and by differences in the age of the embryos.

But both cases contain other evidence in favour of the same view: for in Dr. Salisbury's case "her water was constantly dribbling from her," implying more or less constant patency of the urethral canal; whilst Dr. Cobbold states, in regard to his case,* that "it is not a little remarkable that the parents should have averred that she passed three small vermiform entozoa by the urethra, corresponding, to judge from their verbal statements, very closely with the ordinary appearances of Filaria piscium." Judging by verbal statements between parasites so minute as Filaria piscium and Oxyuris vermicularis is ticklish work; and it is amusing to find Dr. Cobbold, in his haste to discover some new and startling relationship for his ova and embryos, neglecting to take the common parasite into consideration.

Dr. Salisbury's figure completes the chain of evidence, for his "Trichina cystica" (Fig. 2) possesses the general contour and characteristic oral aperture of the immature embryos of Oxyuris vermicularis (Fig. 1, after Leuckart). Were the embryo of Fig. 1 unfolded, it would be almost identical in appearance with Fig. 2.

The accidental occurrence of the ova or embryos of entozoa in urine is a fact regarding which observations have long been on record, and it is incredible that any dispute should arise at the present day regarding the right of priority in the discovery of it. Almost as well might a discussion be raised regarding the right of priority in the discovery of cotton fibres in urine. Even, however, had the ova and embryos described by Dr. Cobbold proved to be true urinary parasites, Dr. Lewis's discovery was not subsequent to Dr. Cobbold's. Dr. Lewis's Report, in its original form, is dated April 1870; and the paragraphs in it relating to the filaria were reprinted in full in the *British Medical Journal* of the 19th November, 1870, and referred to in other journals at an earlier date.

Before leaving the subject of the priority of discovery, it may be well to allude to a letter by Dr. Priestley in the *British Medical Journal* (Feb. 15th, 1873). The letter contains the following passage:—"In reference to the subject I may point out that, as long ago as 1857, I described a case of chylous urine, in which the milk-like fluid passed from the bladder was found, on microscopic examination, to contain innumerable linear vibrios, or filariæ, which moved in every direction across the microscopic field"; and "in drawing attention to this early notice of active organisms in chylous urine, I do not in the least wish to detract from the interest and value of Mr. Lewis's discovery of hæmatozoa in the blood, and their relation to the filaria of chyluria." The occurrence of vibrios in urine is a well-known fact, but has nothing to do with filariæ.

On turning to the discussion of the relations existing between the canine and human filariæ, we find the following passage in Mr. Welch's paper:—"A comparison of the embryo of the canine filaria with the woodcuts of Dr. Lewis's hæmatozoon (especially Fig. 3) will show a great concordance in anatomical details when the modifications resulting from death are taken into consideration. The contour and body structure are the same in both, even to the vacuole near the head. The 'delicate enveloping tube' of the human worm is absent in the canine, but by Fig. 1, No. 1, Dr. Lewis's woodcut, it is equally so in the dead hæmatozoon. These remarks will be more lucid by comparing Fig. 10, a dead hæmatozoon, sketched from specimens sent to Netley by Dr. Lewis, with Fig. 8, the dead embryos of the canine filaria—all equally magnified."

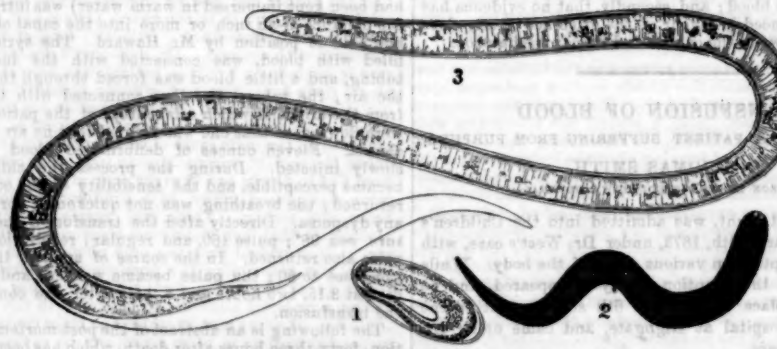

Fig. 1.—Ovum of common thread-worm (Oxyuris vermicularis) containing a nearly mature embryo. Highly magnified. (After Leuckart.)
Fig. 2.—Facsimile of Dr. Salisbury's drawing of "Trichina cystica." Magnified 1000 diameters.
Fig. 3.—Filaria sanguinis hominis carefully drawn to scale. Magnified 1000 diameters.

In this passage the writer advances the proposition that there is a great concordance in anatomical details between the two filariæ, and forthwith proceeds to demonstrate that it is totally untenable. It is only when the words are used loosely that it can be affirmed that "the contour and body structure are the same in both," whilst, by Mr. Welch's own showing, every characteristic and important feature in each differs. The body structure cannot be the same when there is no evidence of striation in the canine worm. The distinctness of the striæ in the human filaria was cautiously understated in the original drawings, but subsequent observations have clearly demonstrated that Dr. Lewis's statements regarding the existence of such markings were absolutely correct (Fig. 3). That the enveloping sac should not be distinctly shown in the figure of the human worm referred to merely shows that the representations of the filariæ in Dr. Lewis's figures are copies from individual specimens, and not idealised diagrams. The non-appearance of the sac in that specimen may have been due to the contained embryo being fully extended, and occupying it in its entire length, or may have arisen from

* British Medical Journal, July 27th, 1872, p. 92.

the position of the sac or the lighting of the preparation having rendered it invisible; but there is no evidence of its actual absence. That the contour of the two filariæ is the same will hardly appear very evident to anyone who compares Mr. Welch's figures with Dr. Lewis's original figures, or with that now published. Mr. Welch himself allows that the relative length and breadth in the two filariæ are very different, and the marked difference in contour arising from this, as well as from the abruptly truncate head and elongated tail of the canine worm as compared with the conical head and comparatively short tail of the human one, cannot fail to strike all observers. Badly preserved specimens of almost any small filariæ will retain certain features of generic resemblance to one another when every specific feature in their structure has been lost or obscured by imperfect preservation, and Mr. Welch's figure would appear to have been drawn from a bad, or rather distorted, specimen of the human filaria, as the length and breadth are totally out of proportion to one another in it.

It is no doubt a difficult matter to obtain a correct idea or drawing of filariæ when preserved along with blood, as they are very liable to be obscured by the mass of blood-corpuscles, or distorted by the coagulation of the fluid. Prolonged preservation in spirit does not obscure either the enveloping sac or the transverse striæ (Fig. 3), so that had such features been present in the canine filaria, there was ample opportunity for their detection. It would have been better to have compared the drawings of the canine filaria with the original correct drawings of the human filaria.

In conclusion, it may be stated, first, that until it can be distinctly proved that true filariæ had been observed in chylous urine before March, 1870, Dr. Lewis must be regarded as the original discoverer of their presence there, as well as in the blood; and, secondly, that no evidence has as yet been adduced in favour of the existence of any close relationship between the canine and human hæmatozoa.

TRANSFUSION OF BLOOD

IN THE CASE OF A PATIENT SUFFERING FROM PURPURA.

BY THOMAS SMITH,

SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

A. S——, aged eight, was admitted into the Children's Hospital February 14th, 1873, under Dr. West's care, with a purpurous eruption on various parts of the body. While in the hospital the eruption nearly disappeared, and no bleeding took place. On March 6th she was sent to the Convalescent Hospital at Highgate, and came under Dr. John Murray's care.

At Highgate she suffered severely from epistaxis, for which she took perchloride of iron, was injected subcutaneously with ergotine, and latterly was obliged to have her nostrils plugged with lint steeped in perchloride of iron.

On May 1st she was sent back to the Children's Hospital to be under Dr. West's care, on account of the frequently recurring epistaxis. Appropriate constitutional remedies were ordered, and no bleeding occurred until the second day from her admission. On that day she was well enough to sit up in bed, and read for her own amusement. She had had a good night, and her temperature was 98·6°, when bleeding came on from the left nostril, and continued off and on the whole day; in the evening the anterior nostrils were plugged, and various means were used to restrain the hæmorrhage, but without effect. During the whole of this day she vomited at intervals, and neither food nor medicine could be retained.

I first saw the patient on Saturday, May 3rd, at 9 A.M. The epistaxis had ceased two hours. She was absolutely blanched; her skin was cold, and her pulse almost imperceptible. The temperature was 97°; the conjunctivæ were insensible. She was in a lethargic condition, but could be roused. No nourishment had been given for some hours, as her stomach would retain nothing. I suggested transfusion, and advised the cautious administration of small quantities of milk-and-brandy by the mouth, and a nutrient enema at once.

Dr. West, under whose care the patient was, having been consulted, considered the performance of transfusion justifiable, and at 12.30 the operation was performed, the pulse being at that time imperceptible, the temperature 97°, the conjunctivæ insensible, and the voice almost lost. Indeed, the general condition had somewhat deteriorated since the morning, though the child had retained a few spoonfuls of brandy-and-milk and an enema of beef-tea.

The apparatus employed consisted of a wire egg-beater, a hair sieve, a three-ounce glass aspirator syringe, a fine blunt-ended aspirator canula, having a lateral and a terminal opening, a short piece of india-rubber tubing with a brass nozzle at either end connecting the syringe with the canula, a tall narrow vessel standing in warm water for defibrinating the blood, and a suitable vessel floated in warm water to contain the defibrinated blood.

The blood was drawn from a healthy adult, and was allowed to flow into a three-ounce measure; as the measure became filled it was poured into the tall, narrow glass vessel, and subjected to the action of the egg-beater by Mr. Haward, who rotated the beater between the palms of his hands. When twelve ounces of blood had been collected the vein was closed. The blood having been whipped for three or four minutes, it was strained through the hair sieve, and again subjected to the action of the egg-beater for about the same time. At the end of the first beating a considerable quantity of fibrine had collected on the egg-whip; this was not removed, as it might serve to entangle any fibrine remaining in the blood. After the second beating the blood gave up as much or more fibrine as it did after the first. The blood was again strained into a vessel kept at a suitable temperature in warm water.

A vein being opened at the bend of the patient's arm, the canula (which with the syringe and india-rubber tubing had been kept immersed in warm water) was introduced for the distance of an inch or more into the canal of the vein, and held in position by Mr. Haward. The syringe, being filled with blood, was connected with the india-rubber tubing, and a little blood was forced through this to expel the air; the tubing was then connected with the canula, from the orifice of which a few drops of the patient's blood were flowing, so that one was assured that no air was in the canula. Eleven ounces of defibrinated blood were thus slowly injected. During the process the child's pulse became perceptible, and the sensibility of the conjunctivæ returned; the breathing was not quickened, nor was there any dyspnœa. Directly after the transfusion the temperature was 98°; pulse 160, and regular; respiration 40; the voice also returned. In the course of an hour the respiration rose to 80; the pulse became weaker; and the child died at 3.15, two hours and a half after the completion of the transfusion.

The following is an abstract of the post-mortem examination, forty-three hours after death, which has been carefully and minutely recorded by Mr. Beach. A few purpurous spots were found scattered on the body; one or two were situated on the visceral pericardium; over the right cerebral hemisphere was an effusion of blood as large as a five-shilling piece, and apparently recent. The heart weighed 4¼ oz.; both ventricles were contracted, the left containing fluid, black blood, and some adherent pale-red clot; the left auricle also contained fluid blood and some pale-red coagula. The right ventricle contained a moderate quantity of fluid blood, and a small reddish coagulum passing into the pulmonary artery. Both auricles contained some post-mortem clots. Following up the riband-like clot in the pulmonary artery, which was of pale-reddish colour, no signs of embolism were found either in the large or small pulmonary vessels. The lungs were crepitant throughout, and collapsed completely on the opening of the chest; there were no lobular congestions or solidifications of the lung-tissue.

Remarks.—I have described the operation somewhat minutely from the fact that, the whole question of transfusion being at present under discussion, the record of the manipulative details are of some importance.

In a patient known to be suffering from purpura, it may be asked, why employ defibrinated blood? My reply is, on account of the difficulty of using natural blood unless with proper appliances. I believe that if natural blood is to be used, the best way of introducing it is by direct transfusion with Dr. Aveling's apparatus, and this I should have employed had I been able to procure the instrument. I had at hand Ferguson's instrument for transfusion, with

funnel, syringe, and flute-key valve; and though I had a few days before assisted in the use of this apparatus in a case of successful transfusion with defibrinated blood, I am convinced that in its present form it is not a convenient instrument where one wishes to use natural blood.

If defibrinated blood is to be transfused, I can imagine no apparatus more easy to use with safety than such as was employed in this case—namely, a good glass syringe, a fine canula, and a connecting india-rubber tube. It is doubtless an advantage that the cylinder of the syringe should be of glass, so that one can see if it contains froth or bubbles, and thus avoid the injection of air with the blood.

I would call attention to a difficulty in the employment of Dr. Aveling's instrument that might sometimes occur in hospital practice—namely, that the giver of the blood might, and I think often would, demur to the introduction of a tube into his vein. For a comparatively moderate pecuniary reward a man may consent to part with some of his blood by venesection: it is an operation with which he is familiar, at least by hearsay, and which has no terrors for him. But if the drawing of the blood by the insertion of a tube into the vein is to be part of the bargain, there are many who would withhold their consent altogether, and others who would only give it for extortionate pecuniary recompense. If defibrinated blood is (as it seems likely that it is) as effectual for the purposes of transfusion as natural blood, it cannot be doubted that it can be used far more easily, and with more safety in respect of the danger of embolism, than natural blood. If, on the other hand, natural blood is to be employed, Aveling's apparatus seems to be the best and safest of those in use; though I may mention that the tube usually furnished for insertion into the blood-receiver's vein is too large to be used in the case of a child.

In the case related above no signs of pulmonary embolism were found at the post-mortem. The rapid breathing which came on before death I believe to have been part of the agony of dying, and not a symptom of the cause of death. The only advantage gained by transfusion in this case was, probably, the prolongation of life for an hour or two.

Stratford-place, W.

FURTHER OBSERVATIONS
ON

THE ENGADINE AS A HEALTH-RESORT.

BY J. BURNEY YEO, M.B., M.R.C.P.,
HON. FELLOW OF KING'S COLLEGE, ASSISTANT-PHYSICIAN TO KING'S COLLEGE AND THE BROMPTON HOSPITALS.

SINCE the publication of my "Notes on the Engadine,"* I have had the opportunity of making observations, during three consecutive seasons, on the influence of the climate of that region on different constitutions and various forms of disease. As it seems probable that I may be prevented from continuing these observations, in which I have taken so much interest, a final record of the results of my experience will probably be of some value to those who take an interest in the Engadine as a health-resort. In reviewing what I have already written on this subject, and especially in respect of the use of the mineral springs of St. Moritz, it is a satisfaction to me to be able to declare that an enlarged experience has confirmed my original judgments, and given them, for the most part, a wider application. The precautions which I recommended in the use of the St. Moritz waters have not only been vindicated by the testimony of other English physicians,† but they have had the effect of modifying the practice of the resident physicians there and elsewhere.

In repeating the warnings I have given in the little work already referred to, as to the risk that is incurred in sending certain cases to the Engadine, I would add that there have been patients unwisely sent there who have found a last resting-place in that mountain-valley! It is greatly too common with regard to the influence of climate, as indeed it is with most other medical matters, for persons to generalise hastily from their own personal experience, or rather sensations, and these they often misunderstand, and almost invariably misinterpret. There is, however, no reason for surprise that the Engadine has lately risen into such high repute as a health-resort; to me the wonder rather is why it was not resorted to by English people many years ago. It is a locality quite unique and without parallel within the same distance from this country. It is true that mountain air at an equal or nearly an equal elevation may be had at Mürren, on the Righi, the Æggischhorn, the Bell Alp, and elsewhere; but in most, if not all these places, unless a practised mountaineer, one is, comparatively speaking, "cabin'd, cribb'd, confin'd"; whereas in the Engadine there extend miles and miles of good high road in the open valley, where drives and level walks to any extent may be taken, at an average altitude of between 5000 and 6000 feet above the sea. Nevertheless, "Try the Engadine" has been too universal and indiscriminate a prescription.

In the first place I shall point out the cases which my experience has shown to be ill-suited to a residence in the Engadine.

Foremost among these I should place patients who suffer from cardiac or vascular degenerations, or from organic imperfection or weakness of the circulating organs. I would include in this class cases of valvular disease, cases of atheromatous disease of the vessels, cases of fatty heart, cases of angina pectoris, cases of over-growth in young persons (especially before that growth is complete), cases of congenital smallness of the heart, and cases of dilated or feeble heart from more or less permanent imperfect nutrition of its muscular tissue. I would exclude from this class cases of temporary functional vascular weakness. The reason why these cases do badly in the Engadine is, that they cannot accommodate themselves well to the rapid alternations of temperature which are common there, and chiefly because they are unable to respond to the demand for increased circulatory and respiratory activity which is needed in order to breathe efficiently in the thin rarefied air of that elevated region. An additional strain is there added to these already overtaxed organs. Moreover, one winter in the year provides quite as much of cold weather as these cases can bear with advantage. There must be at least a latent possibility of vigorous respiratory and circulatory function in order to ensure benefit and avoid actual discomfort from a residence at St. Moritz.

Organic diseases of the nervous system, or threatened organic disease of the nervous system, whether associated with vascular changes or arising from other causes, are unsuited to the Engadine. Why it ever occurred to anyone to send cases of paralysis to the Upper Engadine has puzzled me more than once. The risk of injury is obviously great, the chance of amelioration singularly slight. At Tarasp, in the Lower Engadine, I have, however, seen one or two such cases improve. But there the conditions of life are very different.

The climate of the Upper Engadine is also injurious to cases of chronic gout and rheumatism, and to most of those disorders—and they are very numerous—which have their foundation in a gouty or rheumatic predisposition. I would associate with this class cases of dyspepsia due to inactivity of the liver with a tendency to engorgement of the portal vein and its tributaries. It is easy to find a reason for this. The dry cold air of the Engadine (unless counteracted by the power of taking very active muscular exertion) braces the integument of the body frequently to the chilling of it; the vessels of the skin become contracted, the skin itself dry and furrowed, its secretion diminished, and its function lowered. The diminished activity of the skin throws more excreting work on the visceral glands, the contraction of its vessels leads to increased congestion of the internal organs if there already exists a tendency in that direction, and thus it has again and again happened, when cases of the kind I am now alluding to have been sent to St. Moritz, that they have suffered, some from severe gastric irritation, loss of appetite, flatulence and acidity, some from intestinal catarrh with diarrhœic and dysenteric attacks, and some, on the other hand, from obstinate constipation, and I have seen even stercoraceous vomiting.

Neuralgias which are commonly called "rheumatic," and which are associated with local fibrous inflammation, are sometimes aggravated to an extraordinary degree by the

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* Notes of a Season at St. Moritz and Tarasp. Longmans.
† See especially Dr. Sedgwick's brochure on Tarasp.

climate of the Upper Engadine. One such case, of extreme severity, will be remembered by many who were in St. Moritz in the season of 1870. This gentleman had to be conveyed home the whole of the way from St. Moritz to London on his back! Other cases I have seen of the same kind, who escaping in time from the unfavourable influence of this watering-place, have obtained immediate relief from the severity of their symptoms on removal to a warmer neighbourhood. I recommended a patient, in the season of 1871, whose neuralgic pains were becoming daily more and more severe, to remove at once to Ragatz, but his symptoms were so greatly mitigated by the time he reached Thusis, only six hours from St. Moritz, that he was content to remain there. I presume no one would think of sending cases of chronic renal disease to the Engadine, but I have seen one case in St. Moritz of slight albuminuria continuing after scarlet fever, in a young lady, who certainly did well there. The season (1871) was a remarkably fine and warm one. The albumen, however, did not permanently disappear, and I should not recommend a repetition of the experiment, as I believe a cold season, like that of 1870 or 1872, might make matters worse.

But I must interrupt my catalogue of cases which are unsuited to the climate of the Engadine, lest I should be accused of a desire to "curse it altogether," whereas, on the contrary, I have the very highest opinion of its usefulness in a great many cases, as I have shown in my book on this subject. There is an increasing tendency to bring St. Moritz into favour as a "ladies' bath" (!) and uterine cases, real and unreal, abound there.

If I mistake not, the spring of St. Moritz will be regarded with peculiar veneration and often visited by disconsolate wives and unsatisfied matrons. Hitherto the saint has shown himself by no means inexorable; and I expect to hear of substantial acknowledgments of his beneficent interference, in the usual form of stained glass windows in the English church, with an authentic effigy of the saint himself, turning his toes out in a becoming saintly manner, and drinking a glass of his own invigorating spring! It is not, indeed, remarkable that rest from unwholesome excitement, the advantage of regular exercise in pure bracing air, and the adoption for a time of simple habits of life, should be attended with a renewed nutritive and functional activity in the uterine as well as in the other organic functions. This, and nothing more mysterious, is doubtless the true account of the influence of a residence at St. Moritz in that particular direction.

(To be concluded.)

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI: *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

MIXED TUMOUR OF THE FEMUR; AMPUTATION AT HIP-JOINT; SECONDARY DEPOSITS IN LUNGS; DEATH.

(Under the care of Mr. POLLOCK.)

WE reported at page 696 a case of successful amputation through the hip-joint, by Mr. Pollock; but the case the notes of which are subjoined was fatal from the secondary deposits in the lungs. The notes, taken by the clinical clerk, Mr. Frost, are supplied by Mr. Cresswell Baker, house-surgeon.

J. W——, aged twenty-one, was admitted on Dec. 20th, 1872, with a painful swelling in the left thigh, which had existed for two weeks. The tumour was slightly elastic, situated at the lower end of the femur, and evidently connected with bone; it extended across the front of the thigh, side to side. Circumference, 15¼ inches; measurement in the same position in opposite limb, 12¾ inches. Numerous ecthymatous pustules existed on the left leg. Ordered ten grains of iodide of potassium three times a day; and diluted nitrate-of-mercury ointment (1 to 6) to be applied to the sores.

Dec. 28th.—The knee-joint is becoming stiffer; swelling not increased; ecthyma still remains.

Jan. 13th, 1873.—Circumference of limb is now 16½ in.

16th.—At 1 P.M. amputation through the hip-joint was performed by antero-posterior flaps, after the patient had been put under the influence of ether. Silk ligatures were used for securing the vessels, and a continuous silk suture for bringing the lips of the wound together. Wound dressed with carbolic lotion.

18th.—The sutures were removed from the central portion of the wound.

The patient continued to progress well till the 25th of January, when he experienced severe throbbing pain in the stump, and suffered from profuse sweating. Sutures removed from the whole extent of the wound, which has closed.

28th.—One of the ligatures came away to-day. A sore has formed over the sacrum. Water-bed ordered.

29th.—More ligatures came away. Bowels have been very irregular in action since the operation. Ordered an enema.

On the first four days of February many ligatures came away, that from the femoral separating on the 2nd. About that time patient had a troublesome cough, for which he took medicine for some time. Moist sounds heard in the chest. Respiration 46.

Feb. 9th.—The stump has not done well for the last three days. Granulations pale and flabby. The last ligature removed.

13th.—Chest symptoms much worse. From this time he gradually got worse, and died at 10.30 P.M. on the 14th. The temperature, which was 101° F. before the operation, never exceeded 102 6'. A hypodermic injection of one-third of a grain of morphia was given every morning, and generally in the evening. The tumour was examined microscopically by Mr. Haward, who reported that it was of a mixed character, consisting in some parts of cartilage, and in others of the round and oval celled sarcoma, with here and there an increase of the intercellular substance and sparsely scattered cartilage cells.

Post-mortem examination sixteen hours after death.—The wound was healed with the exception of two sinuses, which led up to a small suppurating cavity at the outer side of the acetabulum, which was itself healthy. There were pleural adhesions on both sides, and a small quantity of fluid in the left pleural cavity. Attached to the visceral pleura, and projecting into the pleural cavity on each side, were numerous tumours, mostly of a round or ovoid shape, and varying in size from a pea to a hen's egg. These were firm and elastic, and to the naked eye presented very much the appearance of cartilage. Under the microscope they were seen to consist chiefly of round and oval cells, which, in some parts, were elongated and fusiform. An examination of many sections discovered, in a few, portions in which there was an increase of the intercellular substance imbedded in which were a few ill-formed cartilage cells. Throughout both lungs were numerous growths of a similar character. To the pericardium were attached several similar growths. Heart, liver, and spleen were natural; the kidneys were congested.

HIGHGATE INFIRMARY.

A CASE OF GLOSSO-LARYNGEAL PARALYSIS (RETROGRESSIVE); WITH REMARKS.

(Under the care of Dr. THOS. STRETCH DOWSE.)

THIS case is of a nature not often met with, and, because the tongue and larynx are the principal parts involved, comes under the designation of glosso-laryngeal paralysis. The disease at its onset is characterised by difficulty in the pronunciation of certain letters, as well as by diminution of motor power in the facial, lingual, and laryngo-pharyngeal muscles. The voice becomes implicated, and the laryngeal sounds, instead of passing through the mouth and becoming perfected by the motion of the lips, make their way through the nose, producing a nasal resonance. The acts of deglutition are first difficult, then impossible. The patient in

this case exhibits in an extremely marked degree the signs and symptoms just enumerated. He presented himself for admission at the Highgate Hospital on the 10th of January last with the following history:—

Twenty-eight years of age; no signs or traces of syphilis; has always been a steady, even-tempered man, and up to the age of sixteen had good health. At this time he fell from a tree. Precise information cannot be gained of his state after the fall. It appears that he had hæmorrhage from the nose, mouth, and ears. This, if true, would lead one to the conclusion that the base of the skull was fractured. He was taken to the Royal Free Hospital, Gray's-inn-road, where he ultimately recovered under the care of Mr. de Méric. When twenty years of age he enlisted as a soldier, and was sent to Canada, where he had a sunstroke. He was then discharged from the army, and returned to England. His health was quite good in every way until eighteen months ago, when he was brought home in the middle of a very hot day in a fit, and was insensible for an hour. His wife says that when consciousness returned he stuttered, and had difficulty in bringing out his words for a month or more. Since that time he has not followed any occupation; and although his intellect remained clear, he seemed stupid and dull, and frequently complained of pain in the back of the head. On the 6th of January last he was seized with another fit, but did not entirely lose consciousness; and upon coming to himself it was found that his left arm was completely paralysed, and the jaw locked, so that he was unable to get food between the teeth or utter a sound. He was in this state when first seen.

The lower jaw could not be depressed for more than half an inch; the tongue was immovable; saliva was dribbling from the mouth, and there was considerable paralysis of the muscles of each forearm, with deficiency of grasping and co-ordinating power, more marked, however, in the left than in the right. He walked slowly, but did not stagger or appear giddy. There was a calm and slightly idiotic expression of countenance, and upon examining the head a deep furrow of depressed bone was found in the direction of the left parieto-lambdoidal suture. When restrained to be fed by means of the stomach-pump, he sometimes got excited and became rather violent, but this state was only momentary, and passed off with the cause. After he had been in the hospital about a week, the use of the stomach-pump was discontinued, and fluid nutriment was passed into the stomach through the nose by means of india-rubber tubing. Upon more than one occasion he was found partially unconscious, in a state almost amounting to asphyxia, which arose from the pressure of a bolus of food upon the epiglottis. When in this condition the sphincters were relaxed, and fæces and urine passed involuntarily. Notwithstanding this, there was at times a doubt as to the extent of voluntary power which he possessed over the paralysed parts. One day, when the tube of the stomach-pump was being introduced, some difficulty was experienced when it came to the pharynx, and one of the attendants gave him pain by pressing too hard upon his leg. This drew his attention away, and not only did the tube at once pass easily, but his jaw dropped fully. The parts paralysed, the amount of palsy, and the manner in which these conditions present themselves, will be best considered in the following order.

First, then, with regard to facial expression. It cannot be said that this case presents marked labial paralysis over that of several other muscles of expression. There is considerable paralysis, however, about the orbicularis oris, which prevents him from bringing the lips together, as in whistling, pronouncing some of the vowels, or expiring a column of air; and, from the lips being at all times slightly apart, there is constant dribbling of saliva from the mouth. When made to laugh, as a rule, those muscles which draw up the angles of the mouth—the zygomatici and risorii—usually act isco-ordinately, giving one at first sight the impression that the muscles on one side of the face are considerably more palsied than on the other. This is true in a measure, and presents a point of interest. Invariably when this act is performed, the left angle of the mouth is drawn up before the right. The lower jaw is partially depressed, and the patient has no voluntary power to extend it beyond a given point; yet when he performs an extra inspiratory effort, as that associated with yawning, when the shoulders are raised and the chest and head become fixed, the depressors of the lower jaw—namely, the digastric, the stylo-hyoid, and the genio-hyoid—appear to come into play; the hyoid bone becomes elevated, and the jaw drops, and returns to its former position by an apparently natural and voluntary effort. This appears to be the chief complication which makes this case to differ from other recorded cases of glosso-laryngeal paralysis. The tongue is almost motionless. When asked to protrude it, he can at times (this is not invariably the case) move it just over the edge of the lower row of teeth, and when drawn out forcibly by a pair of forceps, it is smartly retracted, showing that the genio-hyo-glossus muscle is not so much palsied as the hyo-glossi and linguales, as he is totally unable to render it concave, or move it from side to side.

The nutrition and sensation of the mucous surface of the tongue does not appear to be interfered with. There was some difficulty in examining carefully the velum and pillars of the fauces, and the interior of the larynx, from his not being able to depress the lower jaw sufficiently. After as exact an observation as possible, the isthmus faucium, including the palato-glossi, palato-pharyngei, uvula, as well as the levatores and tensores palati, seemed almost devoid of tactile sensibility. On stimulating these parts by means of a quill, the muscles did not respond, the uvula and velum pendulum palati remaining in their flaccid condition, and there was no reflex movement of the middle and inferior constrictors to produce the feeling of nausea which invariably accompanies this act; but directly the posterior wall of the superior constrictor muscle was touched it gave him pain. Trousseau says that in these cases sensibility is everywhere normal, and that irritation of the mucous membrane of the soft palate produces motion of the velum by reflex action.

The patient is almost devoid of masticating power, not so much from absolute inability to raise and depress the lower jaw as from the absence of alternation of lateral movements which are influenced by the external pterygoid muscles. He has scarcely any power to execute the first or second stages of the act of deglutition. This is readily accounted for by the almost perfect immobility of the tongue. It cannot be pressed upward against the hard palate, and its base cannot be retracted at the same time that the larynx and pharynx are raised. The epiglottis, which in the second stage would naturally fall upon and close the upper aperture of the larynx, remains partially inactive, and does not allow the food to pass over it to be grasped by the pharyngeal constrictor. Hence arises the condition of partial asphyxia, from which he has not unfrequently suffered. The method he adopts to take solid food is this: he crams the mouth until it can hold no more, and after the mass of food has become softened by the saliva he pushes it with his finger through the isthmus of the fauces over the epiglottis, where it falls by gravitation into the grasp of the inferior constrictor of the pharynx. When once here this muscle acts to propel it onward. From this it was concluded that the inferior constrictor does not participate to such a degree in the paralysis, at all events in the present stage of the disease. This might perhaps be accounted for on the ground that this muscle receives a branch from the external laryngeal nerve, in addition to the supply from the pharyngeal plexus. It sometimes happens that the fluids which he is attempting to swallow are forcibly ejected, not only from the mouth, but through the nostrils. This is the result of some portion of the fluid finding its way through the chink of the glottis in consequence of the incomplete closure of the aryteno-epiglottidean folds. The next point to be noticed, and a most important one, is that the man is absolutely dumb. He cannot pronounce a consonant or vowel, and the only sound which emanates from the larynx is a grunt. This complete aphonia, according to Dumeuil, depends upon two causes—paralysis of the muscles of the larynx, and paralysis of the thoracic muscles. Indeed, physiological experiments prove that when the spinal accessory is torn off at its root complete aphonia ensues from relaxation of the vocal cords. As in almost all recorded cases, so in this: the paralysis is not confined merely to the parts just described. In this patient there is palsy of both arms, with muscular atrophy; this is considerably more marked in the left upper extremity than in the right. The thoracic muscles are also similarly affected, and it is impossible for the man to expand his chest by a deep inspiration. The lungs are healthy; heart sounds and respiratory murmur normal. On examining the eyes by the

ophthalmoscope the optic discs were found to be hyperæmic, scarcely amounting to neuritis. In fact, the special senses, sight, hearing, taste, and smell, are all perfect.

It is interesting to observe the comparison which this case bears to others which have been recorded. Trousseau says that this disease (and Duchenne agrees with him) begins gradually, progresses rapidly, and terminates fatally. In the case of this patient the reverse of the first two statements obtains, as the disease commenced suddenly, and up to the present time the paralysis is decidedly retrogressive. When the patient was first admitted both upper extremities were devoid of co-ordinating power. Now he is able to do a moderate day's work in the grounds—digging, wheeling, and so on. He is making flesh fast, and his intellect is in no way affected. Still, it must be understood that the motor paralysis of the tongue, pharynx, and larynx is quite stationary. The general improvement in his health is, for the most part, due to the regular and careful way in which he is fed, rather than to the administration of either medicine or faradisation. Potions of beef-tea and eggs are given regularly night and morning by means of a plain piece of india-rubber tubing, which he passes into the œsophagus through the nostril himself. And attention should be paid to this simple but effectual mode of passing the food into the stomach. There cannot be a doubt that careful attention to this point checked the onward progress of the disease, and saved the man from death by inanition.

It is interesting to trace the seat of the cerebral lesion by the state of the parts involved; and it is impossible to come to any other conclusion than that the motor tract and motor centre are the parts principally affected. In former recorded cases there has been found, upon post-mortem examination, atrophic degeneration of the roots of the eighth pair, as well as of the facial, hypoglossal, and anterior spinal. Therefore, by deduction, it seems most probable that these nerves are in this case the seats of lesion.

NEWCASTLE INFIRMARY.

LITHOTOMY; LITHOTRITY; EXCISION OF THE ELBOW-JOINT; SYMBLEPHARON.

(By Dr. ARNISON.)

For the notes of the following operations, performed on March 31st, 1873, we are indebted to Mr. G. Rowell, house-surgeon:—

Lithotomy.—A. D——, aged three years and a half, male, admitted March 27th, has been the subject of calculous symptoms for nearly two months. While anæsthetised by ether and chloroform, the ordinary sinistro-lateral operation of lithotomy, universally practised by the surgeons to this infirmary with uniform success (no fatal case for eight years), was performed by Dr. Arnison. Slight hæmorrhage occurred, which was speedily arrested by a plug of cotton-wool. Progress satisfactory, and patient has been discharged cured.

Lithotrity.—M. Y——, aged twenty-seven, married woman, had suffered from the usual symptoms of vesical calculus for two years, for which she was admitted on March 27th. On sounding, the calculus seemed fixed at the neck of the bladder. The calculus was dislodged, and crushed on March 31st by Dr. Arnison. For three days fragments of stone continued to be voided with the urine, attended with some increase in the mucous discharge, but no pain. Second crushing April 5th. The remaining fragment of stone was seized, though not readily, being apparently engaged in the corrugated vesical wall, and crushed. When the blade of the instrument was screwed nearly home, its further progress was arrested; and, on extra force being used to the screw, a sudden snap, of metallic character, was heard by the bystanders, giving the impression of a very hard nucleus. The lithotrite, on being withdrawn, presented between its blades some calculous débris, in which, on being washed, was found a common sewing-needle, broken into three unequal parts. The discovery of this afforded a ready explanation of the cause of the difficulty in disengaging the fragment from the wall of the bladder, and of the snap heard on crushing it. In answer to questions directed to find out the way in which the needle had gained admission into the bladder, the patient states that she accidentally swallowed a needle five years ago.—April 6th to 12th: No inconvenience experienced. The patient has been discharged cured.

Excision of elbow-joint.—Isab. S——, aged eight, fell, during play, twelve months ago, on her right elbow. An abscess formed, and has discharged by three openings up to the present time. The joint was excised by Dr. Arnison by means of a single longitudinal incision on the posterior aspect. The wound was brought together by sutures and dressed with carbolic oil, and the arm placed on a bracket-splint set at an obtuse angle.—April 1st to 12th: Steady declension of temperature from 102° on evening of 1st inst. to normal. Wound healthy, and united in greater part. Up to the present the case has done well.

Symblepharon.—William E——, aged forty-four, admitted with palpebral conjunctiva of right side united to ocular, over the lower half of the cornea. Dr. Arnison dissected the adhesion from the surface of the cornea, and fixed its upper part by suture to the bottom of the wound, corresponding to the inferior palpebral sinus or fold. The suture was removed on the third day, and the patient was discharged cured on April 9th.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 23RD, 1873.

MR. PRESCOTT HEWETT, PRESIDENT, IN THE CHAIR.

Mr. JOHN CROFT read notes and exhibited a case of

SUBPERIOSTEAL EXCISION OF HIP-JOINT.

C. B——, aged seven, was brought as an out-patient to St. Thomas's Hospital, on February 6th, 1871, suffering from the first symptoms of hip disease, on the right side, the result of a fall one month previously. His mother was in good health. A maternal aunt had died of consumption. His father died of rheumatic gout. He became gradually worse, and a large abscess formed on the outer side of the thigh, below the joint. On September 11th, he was admitted into the hospital, and the abscess was incised. On November 22nd, a slightly curved incision, three inches long, with its centre opposite the top of the great trochanter, was made down to the bone, dividing the periosteum. The soft parts were then turned aside, and the periosteum cut across at right angles to the first incision, just below the level of the small trochanter. With the bistoury the transverse division of the periosteum was carried round all but the inner and back part of the bone. Then, with a periosteal elevator, like Dr. Sayre's, the periosteum was easily peeled back. An attempt was also made to detach the muscular insertions from the great trochanter, but this was not effected without the use of a knife. The top of the femur was sawn off with a chain saw, just below the small trochanter. This mass having been turned out by the elevator, the acetabulum was freely exposed. Five roundish sequestra, varying in size from a small to a large pea, were picked out of the floor of the space. The portion of femur removed consisted of the head, neck, and two inches of the shaft, measuring from the top of the great trochanter. The wound was partially closed by sutures. After the operation the limb was kept at rest, and extended by means of a bracketed long outside splint, or extension by weight. At the end of four weeks, passive motion was commenced. In the following July, he was able to wear a boot and iron support. The last sinus finally closed at the end of the year 1872. When exhibited, eighteen months since the operation, he was in good health and spirits, and could run about. At the hip, very slight flexion and extension were allowed. The chief movement was of the pelvis on the spine. He could not rotate or abduct the limb. In this respect, therefore, Mr. Croft did not think he had been a gainer by the operation as he performed it. The limb appeared shorter than the opposite one. On measuring from the anterior superior spine of the ilium to the tip of the internal malleolus, the right leg was two inches shorter than the left; but on comparing the length of the right femur with the one not operated upon, the sound femur measured 11¼ inches, and the right bone scarcely the eighth

of an inch less. From the crest of the ilium to the top of the shaft on the right side the distance was three inches, and from the crest of the ilium to the top of the trochanter on the healthy side, four inches. The anterior superior spine of the ilium, on the right side, was one inch above the level of the opposite point of bone. Mr. Croft remarked that though the case did not exhibit any superiority in the matter of range of movement, yet, to the subperiosteal method of operating was due the remarkable and important fact that the diseased femur, from which two inches of shaft were sawn off in November, 1871, was now almost if not quite as long as the healthy femur in the opposite limb.

Mr. WILLIAM ADAMS thought the case interesting, although motion of the joint was not obtained, and really fibrous anchylosis was the result, the same sort of issue occurring as in other hip-joint operations. He believed that the operative procedure in these cases was delayed much too long, and that when an abscess existed it was better to open it, and to operate immediately afterwards.

Mr. BARWELL said that according to his experience Sayre's operation was by no means universally successful; there were many varieties in the mode of procedure, and the subperiosteal was not always advantageous. He also doubted the precise accuracy of the measurement.

Mr. Adams hereupon suggested that the limb should be measured forthwith, and Mr. Croft having assented, the President requested Mr. Callender and Mr. Christopher Heath to examine the child. The report of these gentlemen, brought up some fifteen minutes later, confirmed the accuracy of Mr. Croft's measurement.

Mr. CROFT, in reply, combated the opinion of Mr. Adams as to the time when the operation ought to be performed. Most of these cases have a tendency to lead to waxy degeneration of internal organs, and according to his own experience it appeared that when suppurative synovitis with subsequent caries existed, the case would prove fatal, whereas if a case of necrosis be met with, and action taken early, it would do well. Mobility was retained by preserving the muscular attachments, showing the utility of leaving the periosteum on the top of the femur. Success would not always attend a great operation. In this case two inches were removed, and one inch reproduced.

Mr. W. B. DALBY reported five cases of

TRAUMATIC RUPTURE OF THE TYMPANIC MEMBRANE,

and five others also were mentioned as having come under his notice. In three cases the injury was caused by the head of a pin being thrust through the membrane; in three others, a needle, the point of a pair of scissors, and a blade of straw were used in the same manner. In the remaining four cases the rupture was caused as follows: by a fit of vomiting, by blowing the nose vigorously, by a box on the ear, and by pressing some cotton-wool into the ear. The terminations of these cases were very various, both as regards the healing of the rupture and the extent of permanently impaired hearing. In six out of the ten cases the wound healed, and when no inflammation in the tympanic cavity followed the accident, a few days sufficed for the perforation to close. In the other four cases the perforation did not heal at all, and in two out of three improved hearing was obtained by the use of an artificial membrane, in the form of a piece of moistened cotton-wool, worn pressed up to the tympanum. When suppuration had been once established in the tympanic cavity, the treatment pursued was the same as in cases where the perforation had been the result of disease, and consisted chiefly in the use of astringents. No treatment at all was adopted when the injury was not followed by inflammation in the tympanum. Mr. Dalby pointed out that it did not follow necessarily that the hearing was regained in a greater degree if the rupture healed than when the perforation remained, and that the greatest losses of hearing followed those accidents in which the greatest force was used in producing the rupture. The conclusion arrived at was, that the injury to the nervous structure of the ear behind the tympanum caused the loss of hearing rather than the injury to the membrane itself. Where the shock was very slight, as in the instance of injury from a needle or any sharp instrument, the hearing was regained completely, or nearly so; but if the instrument used were blunt-pointed and considerable force was employed, the resulting deafness was proportionately greater. The same held true when rupture took place from sudden condensation of air in the tympanum (as in blowing the nose), or in the meatus (as in a box on the ear). It was quite impossible, Mr. Dalby said, to recognise a cicatrix in the tympanic membrane if the patient had not been under observation during the process of healing, as thinning of the membrane and other changes occurring during catarrh of the middle ear were sometimes so like cicatrices as not to be distinguishable from them.

Mr. HINTON confirmed the author's opinion as to the hearing powers, doubted whether a box on the ear would produce rupture, and said that all cases of this kind required most careful and accurate diagnosis.

Dr. GREENHOW read the notes of a

CASE OF DIABETES SUCCESSFULLY TREATED WITH SKIMMED MILK,

on the plan of Dr. Donkin. W. H——, a coal porter, was admitted into the Middlesex Hospital under Dr. Greenhow's care, on November 9th, 1872. He had been a man of intemperate habits, and subject to rheumatism and winter cough. On admission he was suffering from œdema of the right leg, and was passing a great deal of urine. He was kept under observation for some days on a restricted diet, and was found to have night and morning cough, raising a good deal of sputum, which continued more or less whilst he remained in the hospital. On December 1st, he passed 102 ounces of urine, containing about four ounces of sugar by the fermentation test. He was then treated with opium, beginning with half a grain twice a day, and gradually increased to one grain three times a day. Beyond this it could not be carried, as the patient's bowels became obstinately confined, his tongue creamy, and his pupils contracted. The quantity of urine somewhat diminished, but not the quantity of sugar it contained. On December 12th he began to take skim-milk as exclusive diet, at first four quarts, increased on December 20th to five quarts, and on January 4th to six quarts, daily. The brandy and opium he was taking were gradually decreased, and on Dec. 19th were entirely discontinued. On Dec. 12th he passed ninety-five ounces of urine, of specific gravity 1035, reduced by fermentation to 1007, giving twenty-eight grains of sugar to the fluid ounce. From this time the average quantity of urine diminished, though less steadily than the proportion of sugar it contained, which grew less and less, until after Jan. 18th, no trace of it was ever found, either by Trommer's or the fermentation test. From Jan. 21st, his diet was gradually changed, and he was allowed bran, gluten cakes, eggs, lean meat, and greens, with a smaller quantity of skimmed milk. On March 12th he was sent to Eastbourne Convalescent Hospital, and was readmitted to the Middlesex Hospital in April for fourteen days, during which time he passed from forty to sixty ounces of urine in the twenty-four hours, perfectly free from sugar, and was otherwise in good health. He continued under observation after his discharge, and on May 23rd remained in the same satisfactory condition. Dr. Greenhow remarked that he did not bring the case forward with the object of recommending skimmed milk as a panacea for the cure of all cases of diabetes; he did not even assert that a permanent cure had been effected in the present case; but, so far as it had gone, he considered the case an important and interesting one, as showing that it was possible to maintain an adult in health and strength for many weeks on a diet of skimmed milk exclusively, and also that such a diet is sometimes at least successful in removing the glycosuria. He did not pretend to determine from his present limited experience in what classes, or in what proportion, of diabetic cases it would be found effectual, but he was of opinion that no other treatment could have done more, if so much, for W. H——. In old-standing cases, especially if complicated with organic disease, it would undoubtedly fail, as do all other plans of treatment that have been tried.

Dr. ANSTIE thought that more importance should be attached to the withdrawal of the alcohol, as a sugar producing agent.

Dr. PAVY was diametrically opposed to the whole of Dr. Greenhow's reasoning, treatment, and conclusions, and thought the effect of their dissemination likely to be pernicious. More observations ought to be collected in dealing with such a subject. This single case was entirely exceptional. He was evidently suffering from some other malady, and it

is probable that the case was really one of glycosuria, and not of diabetes. In criticising the treatment, he remarked as extraordinary that when twelve pints of skim-milk were taken the urine fell from 100 to 60, and eventually to three pints in the twenty-four hours. He had tried ordinary milk and skim-milk, and had found no difference (though THE LANCET emphatically recommended skim-milk). In a serious case lately under his care, a simple dietetic treatment lowered the quantity of urine from six to two pints and a half, and its specific gravity from 1040 to 1020. The skim-milk treatment was then commenced; the quantity of urine rose, and on the first day the sugar returned. The total absence of solid food was sometimes hardly endurable in such cases. The skim-milk treatment had been set forth as a cure for Bright's and Addison's diseases, and for diabetes, and, as far as he could see, without good grounds as regards any one of these diseases.

Dr. DONKIN rose, and, claiming to be the originator of the skim-milk treatment, mentioned a case that had come under his hands on Dec. 14th last (the patient having been a total abstainer for fourteen years, and then having saccharine urine to the extent of twenty-five grains in the ounce). In April the patient had gained a stone in weight under the skim-milk treatment. He then quoted a dietary table composed by Dr. PAVY, in which milk heads the list of injurious foods, criticised dogmatic lines of treatment, and remarked that diabetes was entirely distinct from acute inflammatory disorders, the natural tendency of which was to recovery. He then appealed to the authority of Christison, who recorded that the results of the diabetic treatment of the disease were in his hands negative, and both Prout and Christison had observed that the opium treatment did more harm than good. The remarks of the speaker were then directed specially to the attack made by Dr. PAVY, in which he was called to order by the president.

Dr. PAVY rose to explain that he did not impugn the veracity of the last speaker, but objected to the frequent use of the word cure, inasmuch as a cure, strictly so-called, cannot be said to be effected when the treatment continues to be carried on.

Dr. GREENHOW closed the debate by regretting that any sort of personal discussion had occurred, but maintained that he had simply and honestly brought forward carefully compiled details of a case, leaving the members to judge of its absolute or comparative value.

Reviews and Notices of Books.

Lectures on the Physiology of the Circulation in Plants, in the Lower Animals, and in Man. By J. BELL PETTIGREW, M.D., F.R.S., F.R.S.E.; Pathologist to the Royal Infirmary of Edinburgh, and Curator of the Museum of the Royal College of Surgeons of Edinburgh. Reprint. Edinburgh: Oliver and Boyd. 1873.

[SECOND NOTICE.]

DR. PETTIGREW goes on to show that what holds true of the involuntary muscles also holds true of the voluntary; the latter being, he explains, a development and differentiation of the former. Thus, when a flexor, adductor, or pronator muscle shortens, its corresponding extensor, abductor, or supinator lengthens, and the converse. If, as he points out, the flexors, adductors, and pronators, when they shorten, forcibly drag out the extensors, abductors, and supinators, then the muscles are acting upon and against each other, instead of moving the bones to which they are attached—a principle which of course outrages our ideas of the conservation of energy. Dr. Pettigrew states that the muscles are co-ordinated to definite ends, but in no case made to antagonise. If one muscle is made to strive with another muscle, equilibrium or rest, and not motion, is the result. Carrying out the analogy, Dr. Pettigrew explains that the muscular arrangements of the thorax and abdomen are identical with those of the ventricles; the muscular fibres in these regions being arranged in longitudinal, slightly oblique, oblique, and very oblique spiral lines, which intersect or tend to intersect at more and more obtuse angles, as in the heart. He shows that the capacity of the thorax is increased by the simultaneous shortening of the thoracic muscles, the simultaneous lengthening of the abdominal muscles, and the descent of the diaphragm; the capacity of the thorax being diminished by the simultaneous shortening of the abdominal muscles, the simultaneous elongation of the thoracic muscles, and the ascent of the diaphragm. When the capacity of the thorax is increased that of the abdomen is diminished, and *vice versâ*; the thoracic and abdominal muscles working in harmony to produce these results, and not against each other. In inspiration a wave of movement travels from the symphysis pubis in the direction of the sternum; in expiration a similar wave travels from the sternum in the direction of the symphysis. These waves cross each other figure-of-8 fashion. The diaphragm itself he compares to half a hollow muscle, its fibres, which are arranged as in the ventricles, simultaneously shortening when the diaphragm descends, and simultaneously elongating when the diaphragm ascends. Nor does he stop here. He next shows that the voluntary muscles of the extremities are arranged in spiral lines, as in the ventricles, thorax, and abdomen. A beautiful analogy is here established; for he explains that if a wax or plaster-of-Paris cast be taken of the cavity of the left ventricle, the cast or mould is twisted upon itself and forms a true screw. The bones of the extremities, he likewise points out, are also twisted upon themselves and form screws, from which it follows that the only difference between the muscular arrangements of the left ventricle of the heart and those of the extremities amounts to this, that in the former the muscles are arranged around a spiral cavity, whereas in the latter they are arranged around spiral bones.

The next subject of interest is the relation of the spiral cavity of the left ventricle to the segments of the mitral valve. Dr. Pettigrew shows that when the left ventricle is open, as in diastole, the blood is arranged in the left ventricular cavity in three spiral columns, occasioned by the projection into the cavity of the two spiral musculi papillares and the manner in which the cavity communicates with the aorta. When the ventricle closes, as in systole, two of the spiral columns of blood are set in motion in a direction from below upwards, and shut, by a wedging, screwing motion, the segments of the mitral valve; while the third column, by a similar but opposite movement, swirls aside and opens the segments of the aortic semilunar valve. The left ventricle literally wrings the blood out of its interior.

The account given of the structure and movements of the heart is the most complete in any language, and we heartily recommend to our readers a perusal of this portion of Dr. Pettigrew's lectures. The description of the structure and movements of the heart and valves is naturally followed by an account of the sounds of the heart. The nerves of the heart are next taken up. It would be difficult to speak too highly of Dr. Pettigrew's nerve dissections. They obtained for him the graduation gold medal of the University of Edinburgh in 1861, as his muscular fibre dissections of the heart obtained him the senior anatomy gold medal in 1859. They are an admirable example of dexterous and delicate manipulation. To the nerves of the heart Dr. Pettigrew has dedicated himself *con amore*. He describes and figures the ganglia and nerves of the heart, and their connexion with the cerebro-spinal and sympathetic systems in mammalia. He points out the precise relations between the cardiac nerves and bloodvessels, and shows that the main trunks of the cardiac vessels (anterior and posterior coronary arteries, &c.) and the cardiac nerves pursue a spiral direction from right to left downwards, and form right-handed spirals; whereas the branches

of the cardiac vessels and the muscular fibres of the ventricles pursue a spiral direction from left to right downwards, and form left-handed spirals. The nerves consequently always cross the branches of the cardiac vessels and the muscular fibres nearly at right angles. The nerves invest the bloodvessels with elaborate plexuses, particularly the coronary sinus, which, as Dr. Pettigrew shows, is covered with a mass of ganglia and nerve filaments. The ganglia are most numerous on the coronary sinus and main vessels, but they also occur where the nerves cross the branches of the main vessels. In the former situation the ganglia vary as to size and shape; being sometimes large, sometimes small, sometimes stellate-shaped, sometimes quadrangular, and sometimes triangular. In the latter situation the ganglia are spindle-shaped and more uniform. From the foregoing account it will be obvious that the cardiac nerves and ganglia are in contact with the bloodvessels and muscular fibres at innumerable points; so that they are in a position either to exert or withhold stimulus, and consequently to regulate the nutrition and movements of the heart. Dr. Pettigrew has examined the ganglia of the heart microscopically, and shows that they are composed for the most part of unipolar and bipolar nerve-cells which contain nuclei, and are in communication with delicate nerve filaments. The nerve filaments in some instances communicate with irregular aggregations of cells; at other times they conduct to and from spindle-shaped masses of cells; while in a third, and not unfrequently, they terminate in rounded or bulbous masses of cells. The presence of ganglia and nerves in such quantity on the surface and in the substance of the heart in part accounts for the movements of the organ when cut out of the body. Dr. Pettigrew does not, however, refer the movements of the heart entirely to its nerves; for he explains that rhythmic movements occur in plants and in cilia where no nerves are present, and in the embryonic heart while yet a mass of nucleated cells and before it contains either muscular fibres or nerves. He ascribes the movements to the vitality of the ultimate elements of the heart, to healthy nutrition, and the power of moving inherent in all living substances. He regards the nerves as co-ordinating, rather than causing, the movements of the heart. He enters at considerable length into the several explanations given of the rhythm of the heart, and tabulates the various theories propounded as to the function performed by the pneumogastric and sympathetic nerves, particularly those branches proceeding to the heart. Their inhibiting and depressing action is also alluded to. Dr. Pettigrew does not regard the blood as the stimulus to the heart. He states, and very properly, that if the presence of this fluid within the heart caused its several compartments to contract they would do so as soon as the blood entered, and long before the compartments were full. But the ventricles, as already explained, completely empty themselves of blood during the systole, so that they must open *spontaneously* before a fresh supply of blood can be admitted. The opening of the ventricles causes the blood to flow into the ventricular cavities, but the presence of the blood in the ventricular cavities is not the occasion of the opening of the ventricles, this being a spontaneous vital movement. That the presence of the blood is not necessary to the movements of the heart is proved by the fact that the heart beats regularly both within and without the body when it is deprived of blood. It also pulsates rhythmically in the embryo before it contains blood. These and other facts of a like nature induce Dr. Pettigrew to believe that the theory of irritability as applied to the heart is more or less fallacious.

Such are a few of the points touched upon. If time and space had permitted, we might have alluded to numerous others not less interesting and equally important. It will not be too much to say that Dr. Pettigrew's lectures will form an era in the history of the circulation. In order to be appreciated they must be carefully perused. They are arranged in three principal divisions—viz., Circulation in Plants, Circulation in Animals (Invertebrata), and Circulation in Animals (Vertebrata). Under the first division the following among other subjects are discussed: endosmose and exosmose as adjuncts of the circulation; the vessels of plants, their function; points of resemblance between the vessels of plants and animals; respiration of plants and animals; cells of plants, their nature and function; the intra-cellular circulation in plants; the lactiferous circulation in plants; the forces which produce the circulation in plants; organic forces a modification of inorganic ones; motion a condition of matter, &c. &c. Under the second division come: respiration and assimilation, as bearing upon the circulation; digestion and circulation; how the circulation connects the organic and inorganic kingdoms; ciliary movements and currents; circulation in the leech contrasted with that in plants; circulation in the star-fish, spider, insect, lobster, fish, Brachiopoda, Gasteropoda, cuttle-fish, &c. &c. Under the third division come: circulation in the fish, aquatic reptiles, frog, Lacerta ocellata, python, crocodile, mammal, &c.; the fœtal circulation; the structure, properties, and function of the lymphatics, bloodvessels, and heart; the structure and function of the valves, and the distribution of the cardiac nerves and ganglia.

We are glad to learn that arrangements are being made for a republication of these important lectures in England and America. They cannot fail to take a permanent place in medical literature, the more especially as they are illustrated by a profusion of engravings, for the most part original.

A SHORT ACCOUNT OF THE

CASE OF THE LATE MR. LUTWIDGE,

Commissioner in Lunacy.

BY WM. MARTIN COATES, M.R.C.S.,
SURGEON TO THE SALISBURY INFIRMARY.

ON the 21st of May, 1873, Mr. Lutwidge, aged seventy-two, apparently in excellent health, and possessing a fine constitution, was suddenly attacked from behind by a criminal patient in Fisherton House Asylum, and wounded in the right temple just above the zygoma. The weapon was a nail, four inches in length; and the murderer had fixed to its head a piece of a carpet watch-bag, which gave him purchase, and so enabled him to drive the nail with great force. Mr. Lutwidge did not fall; he was prevented, apparently, from doing so by the frame of the doorway through which he was passing at the moment of the attack; but he complained of feeling tottering on his legs. It was observed by Mr. Wilkes, the medical commissioner who was present, and by an attendant of the asylum, that his mouth was immediately drawn to the right side.

I saw him at 3.30 P.M., about twenty minutes after the event. He was reclining on a sofa, apparently asleep, and breathing heavily. On being told that I had come to see him, he roused up at once, and told me that one of the patients had struck him on the side of the head, and that he felt a little pain in the right temple and right eye. He made light of the injury. I found a small vertical wound, about a third of an inch in length, above the zygoma, and an inch and a half from the outer edge of the orbit, from which a few drops of dark blood slowly oozed. Around the wound there was slight swelling and ecchymosis. His mouth was drawn to the right. The nail had evidently penetrated the squamous portion of the temporal bone. He protruded his tongue without deviation to right or left;

this he continued to do as long as he remained conscious. His pulse was quiet and regular. We observed that immediately he ceased to talk he fell into a very deep sleep. The pupils were contracted, and acted very slightly.

He was removed to the White Hart Hotel, Salisbury, at 5 P.M., and I, with difficulty, induced him to go to bed, so little ill did he feel. He would not accept assistance in undressing, but fumbled a good deal with his buttons. He was given at his request some tea, which he swallowed easily and relished. Water dressing was applied to the wound and absolute quiet enjoined. At 7 P.M. I saw him again. He had then complete hemiplegia of the left side; pulse 68, moderate in power, and slightly irregular; pupils the same. He was quite sensible, but talkative; his eyelids remained closed during my visit. He was still disposed to fall into deep, snoring sleep; he swallowed with difficulty. Prognosis very unfavourable. Diagnosis, wound of a vessel or vessels within the cranium, with hæmorrhage and consequent pressure on the right hemisphere of the brain. This conclusion was come to from the steadily augmenting paralysis of the left side, from a very small beginning to complete hemiplegia. There was anæsthesia and absence of reflex action in left arm and left lower extremity. My colleague, Mr. George Tatum, saw him with me in consultation at 8 P.M. Mr. Wilkes, the friend and fellow-commissioner in lunacy of Mr. Lutwidge, was associated with us. The question of trephining was of course considered, but unanimously negatived, as we all felt persuaded that the symptoms pointed to hæmorrhage within the cranium.

May 22nd.—8 A.M.: No improvement. He passes urine involuntarily; has evidently lost the vision of the left eye; pulse the same; pupils contracted and sluggish; he is still alternately talkative and drowsy. At 10 A.M. Sir James Paget saw the patient with me. He quite coincided with our prognosis, diagnosis, and treatment by perfect rest, nutritious fluid diet, and the relief of symptoms as they arose, if possible.

From this time to his death, on the 28th, the only new circumstances that occurred were, that on the fourth day from the accident he spontaneously opened his eyes, had some return of reflex action in the lower extremities, and he swallowed fairly well. In other respects the same symptoms went on increasing from day to day; he became more talkative and less coherent, and his sleep more and more resembled coma, until at last the former ended in muttering delirium. His pulse became more and more intermittent, his tongue drier, and during the last twelve hours he was comatose, and his pulse rose to 120 in the minute, and was very irregular. He died on the 28th of May at ten minutes to 7 P.M. His bowels were sluggish from the time of the injury, but yielded to medicines and enemata. He could not control the sphincter of the bladder after the 21st, and this viscus never contained throughout his illness any appreciable quantity of urine.

During the whole period of his illness he never complained or uttered an irritable word, and until the 26th he told anecdotes which we found to be literally correct. He often referred to his accident in a jocular, amused way, but never evinced the least angry feeling against his assailant. The external wound healed by the first intention.

Autopsy, twenty-one hours after death.—I was assisted in the post-mortem examination by my friend Mr. Biggs. The external wound had so completely healed that it had to be looked for carefully. There was slight extravasation of blood in the track of the wound, which passed through the squamous portion of the temporal bone and membranes into the right hemisphere of the cerebrum. The opening in the bone would not quite admit the tip of the little finger. There was lymph spread over the arachnoid, covering the upper surfaces of both hemispheres, and this membrane was throughout vascular. A portion of skull in its entire thickness had been driven before the nail, and was lying in apposition and parallel to the cranium just anterior to the opening. It was kept in this position by a small piece of dura mater attached to it. There was just opposite the wound a rent, measuring an inch in length, on the surface and of the substance of the right cerebrum, through which a black coagulum protruded. On slicing the brain, we found a large cavity in the centre of the right hemisphere, running from within half an inch of the anterior to within an inch of its posterior extremity. This cavity was wholly occupied by a large coagulum, an inch and a half in thickness at its centre, and about an inch at its extremities. It had penetrated into the right lateral ventricle. The brain surrounding the clot was unnaturally soft in texture, and of a deep-pink colour. We could not discover the source of the hæmorrhage. There was an ounce of dark fluid blood between the right hemisphere and tentorium cerebelli. The whole base of the brain was stained by dark-coloured fluid blood. The left hemisphere was normal.

The post-mortem appearances explained most of the symptoms, and showed how fortunate was our decision not to trephine. Such a proceeding would have caused the patient great agony, and could not have possibly benefited him, as it was evident that the cause of death lay in a large clot occupying the centre of the right hemisphere, and making pressure upon the brain-substance itself.

The violent death of this valuable public servant by the deliberate act of this miscreant, who perfectly knew what he was doing, having carefully planned and most cunningly carried out his design, naturally and rightly excites our grief and indignation; and it certainly raises the question whether all deliberate and conscious murderers, sane or insane, should not be destroyed in the true interests of society. This miserable and fretful criminal lunatic can be of no use in this world to anyone, is a perpetual menace and danger to all who approach him, and will be a burthen on the nation as long as he lives. To Mr. Lutwidge a death so painless from beginning to end, at the age of seventy-two, incurred in the performance of a beneficent duty, may, I think, be considered a happy termination of a useful and honourable career.

THE DUBLIN HOSPITALS.

THE Board of Superintendence of these hospitals lately issued their fourteenth annual report. While engaged in the work of inspecting the various establishments, careful inquiry was made by the Board into the conditions and administration of each institution, and into the comfort and general welfare of the patients. Commencing with the Westmoreland Lock Hospital, we find that during the past year 753 patients were admitted, the mortality being 1·43 per cent. At this hospital the patients are required to wear the hospital uniform, and would otherwise appear to be submitted to a tolerably strict discipline, with which they, however, cheerfully comply. The beds consist of straw packed in coarse ticking, and the visitors very properly suggested that this should be superseded by cocoa-nut fibre or hair mattresses. At Steevens' Hospital, 2332 patients were admitted, 71 being small-pox cases, of which 8 died. The general mortality was 2·66 per cent. The upper storey of this institution is entirely devoted to the treatment of constabulary patients. At the Meath Hospital 1144 patients were admitted, the mortality being 6·46 per cent. Fifty-six of the cases were due to small-pox, of which 14 died—a large percentage. The Cork-street Fever Hospital admitted 1481 patients during the year, with a mortality of 13·82 per cent. The small-pox cases amounted to 427 (including 92 not vaccinated), of which 104 died, or 24·35 per cent. This is also a large percentage of deaths, and is probably explicable by the defective sanitary arrangements in that portion of the hospital devoted to the treatment of small-pox, and concerning which the Board found just cause of complaint. The Hardwicke Fever Hospital admitted 1348 patients, the mortality being 13·48 per cent. Of the admissions, 603 were small-pox cases (505 vaccinated), of which 121 died, or 20·06 per cent. The Whitworth Hospital admitted 870 patients, the mortality being 8·68 per cent. The Richmond Hospital admitted 1172 during the year, the mortality being 2·82 per cent. The general arrangements of this institution would appear to be excellent; cooked food is conveyed to each ward in a tin can, the under compartment of which is filled with boiling water; this keeps the meat hot during transit to the several wards. A movable bath mounted on a strong frame with wheels is provided, which enables a patient to take a bath at his bedside. At the Rotundo Lying-in Hospital, 1321 patients were admitted into the labour wards and 200 into the chronic wards, the time spent in

hospital by labour cases averaging 7·43 days, and that by chronic patients 22·08 days. The mortality of chronic cases was 2·51 per cent., and that of labour cases 1·87 per cent., which is considerably lower than the death-rate of the preceding year. This hospital was free from any visitation of puerperal fever during the year. Altogether it appears to be in a most efficient condition. The Coombe Lying-in Hospital admitted 369 cases, the mortality among the parturient women being 1·24 per cent. The Hospital for Incurables admitted 51 patients, and St. Mark's Hospital 357. The annual cost per head for maintenance and for establishment at these various hospitals averaged from £23 to £72.

Foreign Gleanings.

LOCAL USE OF CHLORAL HYDRATE IN SOFT ULCERS AND ULCERATED BUBOES.

IN an article published in the April number of *Giornale Italiano delle Malattie Veneree*, Dr. de Paoli gives his experience of the local action of chloral hydrate in the above cases, such as was exhibited in the Clinique for Venereal and Skin Diseases of Bologna. Four cases are related in which large ulcerated buboes were highly benefited in their last stage by the application of a solution of chloral hydrate (10 parts of chloral to 30 of water). The healing process was remarkably regulated and hastened by the application. The author thinks that in all sores with abundant suppuration and want of tone chloral is of the greatest use, and that its employment may be beneficially extended, as a slightly exciting and antiseptic agent, to suppurating wounds, and especially gunshot wounds. He states that Professor Gamberini has applied the same solution with marked results to the soft ulcers of prostitutes, especially during the later period of cicatrisation, the virulent power and suppuration of the sores being considerably diminished, whilst auto-inoculation of the sores in other parts was not observed in the patients treated. He suggests that chloral hydrate may be a good substitute in certain cases for nitrate of silver and iodoform, and concludes, in summing up his paper, "that it diminishes the virulence of sores, has the advantage of not irritating the inguinal glands, and removes the offensive smell which proceeds from ulcers, especially those of the female genitals."

THE WARM BATH IN PHTHISIS AND OTHER AFFECTIONS OF THE CHEST.

Several experiments have been recently carried on at the Hôpital la Pitié by Professor Lassagne with the view of judging of the effects of the warm bath in phthisis and other diseases of the chest, and the results have been recorded by Mr. Souplet, in the last number of the *Bulletin de Thérapeutique*. The temperature of the bath was always made to be three degrees lower than that of the patient, warm water being added when necessary so as to keep up a constant temperature. The duration of the bath was from twenty to forty-five minutes, according to the strength of the patients. They were given every other day. During the first two or three baths the patients generally experienced a slight degree of oppression, which lasted only about two minutes. Under the influence of the use of the baths the cough subsided, expectoration became easier, the frequency of the pulse diminished, and the temperature fell progressively. At the same time the shivering attacks of pseudo-intermittent phthisis were delayed, and nocturnal sweats diminished notably or even stopped. After the first three or four baths sleep became better, and diarrhœa was lessened or entirely removed. Out of thirteen cases (nine of phthisis, two of pneumonia, and two of pleurisy) in no one instance could any inconvenience be attributed to the employment of the baths, whilst the advantages which they afforded were obvious.

HÆMORRHAGE IN THE FOURTH CEREBRAL VENTRICLE DIAGNOSED DURING LIFE.

This interesting case is recorded as follows in the last number of the *Gaz. Hebd. de Paris*:—A man was brought into the wards of Dr. Lionville at the Hôtel Dieu. He presented symptoms of stertorous respiration; anæsthesia, with resolution of limbs; and difficulty of speech; and shortly after died in a state of collapse. On his being admitted, Dr. Lionville had noticed considerable distension of the bladder, had sounded him, examined the urine, and found 6·25 of glucose and 5 of albumen to 1000 parts of water, and he had put down the diagnosis as hæmorrhage seated in the neighbourhood of the fourth ventricle, on account of polyuria, albuminuria, and glycosuria. The autopsy confirmed the diagnosis. In the protuberance below the fourth ventricle and above the calamus, which, physiologically, is the region which must be punctured for producing polyuria, albuminuria, and glycosuria, there existed a hæmorrhagic spot seated on the right side.

USE OF GELATINE SUPPOSITORIES IN OBSTINATE CONSTIPATION DUE TO ACCUMULATION OF FÆCES IN THE RECTUM.

In the above cases, and when there exists an accumulation of hardened fæcal matter in the rectum or colon, Dr. Nagel (*Allgemeine Wiener Med. Zeitung*, April 1st, 1873) finds that when purgatives and enemata have failed, and in order to dispense with the use of the anal *curette*, suppositories of gelatine constitute an easy, harmless, and effective means of removing the evil. The suppositories are made of brown gelatine. They are steeped in water for twelve hours, and being thus softened and enlarged are introduced into the rectum. By subjecting the patient to a suitable regimen, an evacuation of pultaceous matter is obtained in twenty-four hours. The author attributes these effects to the hygrometric properties of the suppositories.

PRESENCE OF ALCOHOL IN THE HUMAN URINE.

After having shown that urine on putrefying produces alcohol, M. Béchamp has sought to discover alcohol in the urine of persons who had previously been subjected to a *régime* of abstinence from wine and alcoholic drinks. In the urine collected in these conditions, and in which fermentation had been prevented by the addition of a little creasote, M. Béchamp has found enough alcohol to be able to set it on fire. In one of the experiments there was enough alcohol in two litres of urine to be determined by the alcoholometer. The author believes that the liver produces alcohol physiologically.—*Gazette Médicale de Bordeaux.*

THE DEATH UNDER CHLOROFORM AT BROADMOOR ASYLUM.

To the Editor of THE LANCET.

SIR,—With reference to the case of death under chloroform which occurred recently in this asylum, and which was noticed in THE LANCET of the 24th ult., I desire with your permission to make a correction as to the strength of the mixture of chloroform vapour and air which was used. It was stated that the chloroform was administered with Clover's apparatus, and that at the time of commencing the operation the bag contained 11,000 cubic inches of air, of the proportion of 25 minims of chloroform to each 1000 cubic inches. Since the notice of the case was published the apparatus has been carefully examined by Mr. Clover, and by the maker, Mr. Coxeter, in my presence, with the result of showing that the quantity of air which the bag was supposed to contain was over-estimated, and that instead of there being 11,000 cubic inches, the quantity was probably not more than 8400 cubic inches, which would make the proportion 32¾ minims of chloroform in every 1000 cubic inches, or 3·76 per cent. This over-estimation of the amount of air arose from the fact that the bellows were stiff from infrequent use, and did not measure out the full quantity of 1000 inches at each inflation, which they were supposed to measure; and, as in using the apparatus in question it is of great importance that the administrator should have no doubt as to the exact strength of the vapour inhaled, I have suggested to Mr. Coxeter that if the number of cubic inches which every bag is capable of holding were marked upon it, ready means would be thereby afforded for checking the correct action of the bellows.

I am, Sir, your obedient servant,

W. ORANGE.

Broadmoor Asylum, Wokingham, Berks, June 9th, 1873.

THE LANCET.

LONDON: SATURDAY, JUNE 14, 1873.

IN THE LANCET of April 2nd, 1870, we said—"We are convinced that it is practicable to establish a Hospital Sunday for London, if but a few energetic and public-spirited individuals would take the matter in hand." After a lapse of three years, during which we have repeatedly urged that London ought not to lag behind Birmingham, Manchester, or Liverpool, to say nothing of many smaller towns, our prediction is on the point of fulfilment, and Sunday next will inaugurate what we hope and firmly believe is destined to become a permanent metropolitan institution. The way in which the matter has thus come to pass is entirely in accordance with the views which have been expressed in this journal, even to the extent of urging on the very day (9th November last) of Sir SYDNEY WATERLOW's assumption of the Chief Magistracy of the City that he was the man of all others to successfully carry out the plan.

The services rendered to the cause by THE LANCET were handsomely acknowledged at the meeting of the Council of the Metropolitan Hospital Sunday Fund last week. We shall continue to give our support to the movement so long as it is conducted upon principles of which we can thoroughly approve, and we trust that such will always be the case both in London and elsewhere. And this leads us to remark that the adoption of Hospital Sunday by the capital city should hasten the accomplishment of the project for a *national* Hospital Sunday, which we were the first to advocate as far back as 1869, when we pointed out that by such means a revenue of at least a quarter of a million would be secured annually for the support of the institutions which minister relief to sickness and infirmity. What can be successfully done in so vast a community as the metropolitan, with its complex organisations, its teeming multitudes, its manifold necessities, can surely be done with corresponding facility for the kingdom at large, and we trust the day is not far distant when the attempt will be made.

From nearly a thousand pulpits on Sunday next the sacred cause of charity will be pleaded under circumstances which will no doubt inspire the preachers with an eloquence befitting the occasion. At St. Paul's Cathedral the services will be held under the special sanction of Her Majesty the QUEEN, who will be fitly represented at the morning service by their Royal Highnesses the Prince and Princess of WALES; the Lord Mayor and Corporation of the City will also be present in state, so that nothing will be wanting to stamp the day's proceedings with the mark of an authority which should lead to a result far exceeding any that has been attained under less auspicious conditions elsewhere. At Westminster Abbey there will be collections at the morning and afternoon services, as well as at the special service in the evening, when the Archbishop of YORK will advocate the cause. The masses of people whom the superior attractions of music and oratory will draw into these two noble temples, and the smaller congregations of less important edifices, will all, we trust, be animated by one spirit of overflowing large-hearted benevolence, and will give so abundantly out of their own sufficient means, that those who are struggling to provide for the needs of the sick poor of London may be put in a position to carry on their work free from the pecuniary strain that now harasses and impedes most of them.

It may be confidently anticipated that the effect of bringing in this conspicuous manner our medical charities under the notice of the public will be to create an amount of interest in them never felt before, and we shall be much mistaken if this does not eventually lead to such improvements in the administration of the charities as will bring them up to a level with the requirements of our times.

The example of Greenwich, where Canon MILLER—whose name will be had in lasting honour in connexion with Hospital Sunday—has been obliged to anticipate the day fixed for the general collections, inspires us with hope that the amount to be realised will be very large indeed. It is an excellent idea to canvass the City Companies, who are rarely backward in giving where the cause is a good one; and we are glad to observe that the Lord Mayor will receive contributions at the Mansion House up to the end of the present month. A further suggestion that the plan of inviting collections from the working classes through the medium of a Hospital Saturday, which has worked successfully at Manchester and elsewhere, should be adopted, has since been propounded; and seeing how largely our medical charities are used by the artisan and labouring classes, the Mansion-house Council should at once seek to enlist the co-operation of employers of labour in providing boxes or collecting lists at their several establishments.

The compliment paid at the Council meeting last week to the Lord Mayor, when, at the instance of Sir W. GULL, a resolution was adopted that Sir SYDNEY WATERLOW should be appointed permanent chairman of the Council, was thoroughly well deserved; for no one can doubt that it is to him in chiefest measure owing that the Metropolitan Hospital Sunday has emerged from the shadowy land of projects into the full daylight of actuality. Nevertheless, we are inclined to think that Sir SYDNEY WATERLOW was right in his opinion that the Lord Mayor for the time being, and by virtue of his office, should be invariably the president of the Council, for unquestionably the Mansion House ought always to be the centre of the Metropolitan Hospital Sunday organization.

THE late meeting of the College of Physicians was distinguished by an important debate. We have already referred on several occasions to the extraordinary attitude assumed by the Committee of Reference, at least by those members of it who belong to the College of Physicians. These gentlemen had repeatedly laid down the law that the draft recommendations of the Committee respecting the details of the examination scheme were not to be discussed by the College, which was simply to vote them or to reject them *en bloc*. To this a strenuous, but for the most part unsuccessful, opposition had been made by the progressive party in the College on the occasion of

the first Report of the Committee of Reference, which dealt with the distribution of subjects for examination. On Monday last the occasion was still more important; for the second Report of the Committee of Reference, which was then laid before the College, dealt with questions of finance, and settled the respective payments which were to be allotted to the examiners in the various subjects. It was felt by the liberal fellows that if the power of the purse were to be given thus absolutely into the hands of the Committee of Reference, that body would become absolute masters of the fate of the whole profession. Dr. ANSTIE pointed this out distinctly, and was strongly supported by Dr. QUAIN in a motion that the Report of the Committee should be read paragraph by paragraph, and discussed in detail. We are glad to find that this motion was carried; and thus, as the President remarked, the principle was established that recommendations of the Committee of Reference are liable to full discussion and detailed criticism and objections by the constituent bodies. This is an important matter, and the practical importance of the principle was very evident in the course of the discussion which followed. One item in the comparative scale of payments had attracted special attention, and appeared preposterous in the highest degree. We have already remarked on the absurdity of lumping together the subjects of Anatomy and Physiology—an arrangement which betrays the antiquated and unscientific conception of Physiology which the Committee must have entertained. But at least it would have been supposed that the Committee would have recognised the work thus grouped together as enormous in amount, and of very high importance. So far from this, however, they have actually recommended that the total sum received by each examiner in Midwifery and Diseases of Women shall be £150 per annum, while that awarded to each examiner in Anatomy *and* Physiology is only £130 per annum! It is true that this anomaly is apparently mitigated by the fact that there are fewer examiners in Midwifery than in Anatomy and Physiology (six instead of eight); and thus the former may be said to have more work to do than the latter. But this is an altogether delusive argument; for the examiners in Anatomy and Physiology have to test the knowledge of 576 candidates annually, as against 384 who appear at the second examination, in which Midwifery figures as a subject. And the bare idea of supposing that the subject of Midwifery and Diseases of Women (a matter to be learned far more by the experience gained in actual practice than from books or lectures) could be placed higher than the combined subjects of Anatomy and Physiology! Of course, however, the members of the Committee protested that they did not intend to suggest any such view. They observed that the Conjoint Examination was merely to be a minimum test, securing an amount of medical knowledge which would sufficiently protect the public, but not pretending to ensure a deep acquaintance with scientific subjects; that on a practical subject like Midwifery it was necessary to secure rigorous testing by eminent examiners, and that eminent examiners must be well paid. The corollary to this is, of course, that Physiology and Anatomy are unpractical subjects, that any youngster fresh from the schools is fit to examine in them, and that such youngsters ought naturally to be content with inferior pay! Are not Anatomy and Physiology the very groundwork of all rational medicine whatever?—and are they not, moreover, learned once for all in student days, with scarcely a chance of being carried any further amid the distractions of active practice?

On this (the strongest point against the Committee), however, no vote was taken, but it was proposed by Dr. QUAIN that the examiners in Anatomy and Physiology should not be paid at a lower rate than the examiners in Medicine and Surgery, who were each to receive £150, like the examiners in Midwifery. Now, it is obvious that Medicine and Surgery, especially as they will include clinical examinations, have a stronger claim to high remuneration than Midwifery, and the Committee and their friends made sufficient capital out of the time and trouble which would be occupied by these clinical examinations to induce the College to reject Dr. QUAIN's motion. Nevertheless, that motion was essentially just; for, to exercise his calling successfully, a medical practitioner requires a knowledge of physiology fully as imperatively as he needs a knowledge of clinical medicine or surgery. Unquestionably, by far the largest number of instances of medical blundering are connected with questions of feeding, a matter as to which uninstructed medical men are continually guilty either of total neglect or of giving orders which are so improper as to do mischief, especially to young children. If it be true that the examination which the Conjoint Board proposes to establish is to be a minimum standard, that minimum must, nevertheless, include every essential, or the examination will attract no confidence either in the profession or among the public, and no thoughtful person will deny in cool blood that it is at least as important for a medical man to understand the fundamental principles, let us say, of digestion, absorption, secretion, and excretion, as it is for him to know scarlatina from small-pox by their external appearances.

IF anybody is of opinion that the question of supplying medical attendance to the working classes is a perfectly simple one, they will be disabused of the impression by studying what is going on in Manchester just now. We all know how thoroughly such questions are discussed in a place like Manchester. The profession is powerful and the commercial sentiment is powerful, and the provision of medicine for the working classes is one of those questions in which the relation of professional feeling and commercial principles has to be adjusted. We have very little else as yet from Manchester but discussion and discrepancy of opinion. They have had little or no experience of provident dispensaries, and therefore can tell us little of their own knowledge. Nevertheless, we are watching with great interest the discussions and the various investigations which are being or have been made, in order to elucidate the abuse of medical charities, and to establish on a sound and satisfactory footing the attendance of medical men on working men and their families. We may be sure that any doctrines which may once gain the assent of the majority of practitioners in Manchester will lead to experiments of a practical character that will be of the highest interest to the profes-

sion. To give our readers an idea of the extent to which this question is engaging attention in Manchester, we may say that a series of interesting articles is appearing in the *Manchester Guardian* on the subject of the Poor and their Doctors, to which we hope some day more particularly to allude. There has been, as we intimated last week, a meeting of the Committee of Medical Charities of Manchester and Salford, at which proposals were carried in favour of some change in the mode of administering medical relief to the out and home patients, and of a change in the direction of the provident system. Further, the report of the Sub-Committee of the Medico-Ethical Association, adopted by that Association, has been the subject of discussion at a public meeting of the medical profession.

It was at this meeting that very considerable difference of opinion was developed calculated to make the Manchester people think that doctors do differ. The meeting was not entirely medical in its character, for Mr. BECK, of Northampton, and Mr. DALRYMPLE, of Leicester, played a conspicuous part thereat, describing the operation of the Northampton and Leicester Provident Dispensaries; and laymen were allowed to speak, but not to vote. A good letter was read at the beginning of the meeting from Dr. RANSOME, which showed how many questions of difficulty start up as soon as the serious discussion of the subject is commenced. He strongly objected to provident associations independent of external aid and dissociated altogether from existing medical charities. He maintained that medical labour must still be more or less gratuitous. He objected particularly to two of the suggestions of the Medico-Ethical Society: (1) that by cutting away the provident dispensaries from existing charities, and by entirely abandoning subscriptions, they would lose all the prestige necessarily attaching to the old foundations; and (2) by throwing them open to all the medical men in a district they would do away with any distinctive honour in being attached to them; the institutions, under this arrangement, would become mere co-operative associations for cheap doctoring. The following resolution was then proposed and seconded, in accordance with the report of the Sub-Committee of the Manchester Medico-Ethical Association:—

"That this meeting believes that many persons now receiving medical relief at charitable institutions are perfectly able to pay for advice if increased facilities were afforded to them; and that the system of provident dispensaries, or sick societies, seems calculated to afford an easy mode of making such payments, and to remunerate the medical attendant."

Thereupon Mr. ROYLE, making an onslaught on all charitable elements in provident institutions, and expressing his dislike of all he had heard of Northampton and Leicester, moved the following amendment, which, according to the *Manchester Guardian*, was carried by a majority of one—19 to 18.

"That this meeting believes that many persons now receiving medical relief at charitable institutions are perfectly able to pay for advice; and inasmuch as these institutions were established for the poor, are supported by endowments and public subscriptions, and are aided by the unpaid services of medical and surgical practitioners, any system by which the patients of such charities would be enabled to pay towards the maintenance of such institutions would bring them into unfair and unjust competition with the medical practitioners of this country; and instead of any such plan, which would increase the present existing abuse, the boards of such institutions be respectfully requested to institute a real inquiry into the circumstances of their patients, and when they find any person able to pay for such medical or surgical relief, such person be excluded the benefit of such charities, unless under very pressing or special emergencies."

Dr. ROYLE's short view of the case was that working men ought to pay their doctor as they pay their tailor or their baker; that the real poor are provided for by the Poor Law; that artisans make 6*s.* or 7*s.* a day; and that as the medical charities were established for the poor, any contribution to their support by patients would bring them—the medical charities—into competition with the medical practitioners of the country. Dr. ROYLE would seem to argue that the great medical charities, as well as the Poor-law medical system, are to be used only by those who are very poor—something less than artisans.

We cannot think that such a view of these charities will really be taken by a majority of the profession; certainly it will not be taken by the public. Otherwise the estate of pauperism will be more enviable than the condition of the artisan class. We are informed that Dr. ROYLE's amendment was really not carried, but was apparently so in consequence of a mistake of the chairman, by which only the votes of one side of the room were taken. Be this as it may, we look upon this meeting at Manchester as only the beginning of the discussion of this question. We rejoice to see all sides represented, and the public, too, in the persons of laymen who have studied the subject from a public point of view. One thing, however, appears pretty certain—that the profession cannot look upon medicine as a mere commercial article; it has a higher quality, and medical men must act somewhat differently from tailors and bakers.

THE Report of Dr. BRIDGES and Mr. TIMOTHY HOLMES on the health of women, children, and young persons engaged in textile manufactures, with special reference to the hours and ages of employment, or, as it is termed on the title-page, "On proposed Changes in Hours and Ages of Employment in Textile Factories," is to be looked upon rather as a political stop-gap than as the results of a scientific inquiry. Regarded with reference simply to the question whether there was any good ground from a sanitary point of view for certain proposed changes in the hours and ages of employment in textile factories, the report will well serve its purpose. Regarded with reference to what should be looked for in a scientific investigation into the health of women, children, and young persons engaged in textile manufactures with special reference to the hours and ages of employment, the inquiry falls far short of what is desirable. The inquiry, indeed, originally determined upon last session of Parliament as a decent mode of postponing a question which the Government was not then prepared to deal with, had from the first a perfunctory character. Not more than four months, if indeed so much, was allowed for its completion; and of this period of time at least one

month must have been occupied in the preparation of the report before us. The textile manufactures included in the inquiry were cotton, flax, jute, wool, worsted, silk, and lace; and three months must have been the maximum period which could have been given to inspections in various parts of the kingdom, conferences, collection and collation of evidence. The limitation of time, it should have been obvious from the first, would necessarily restrict the inquiry over this large field within very strait bounds and to well-beaten tracts, if it were to lead to any solid results. It is to be regretted that the Commissioners did not see this more clearly, and that they should have sought by the aid of assistant-commissioners to open out new ground. The result might have been foretold. The new work has plainly been done against time, and it is crude and untrustworthy in a high degree. In a period of somewhat less than eight weeks, five Assistant-Commissioners, coming quite new to the subject, appear to have examined and recorded the results of their examination of 10,000 children touching matters of physical degeneration! We regret this all the more as the actual value of the report depends upon conclusions of the Commissioners which the work of the Assistant-Commissioners tends rather to unsettle than to confirm.

The first part of the Report is devoted to a brief account of several conferences with employers and operatives. The second part is devoted to a description of the inspection of factories. This is the most interesting portion of the work. The different processes of manufacture are admirably described, and the ascertained effects of these processes upon health; while the commentaries of the Commissioners, from their personal observation, are full of suggestiveness. If the further questions had been dealt with in the same way by the Commissioners themselves, without the intermediation of assistant-commissioners, the Report would have had a much higher value. The third part gives an account of the opinion of medical practitioners living in the inspected district. It is not easy to understand how this part came to be written. What value can be attached to the opinions loosely expressed of numerous individuals who have obviously never given any systematic thought to the questions submitted to them? What is to be said of a provincial Medical Society which, in answer to the Commissioners, responds that its members have had an extensive practice among a factory population "varying from *one* to thirty-five years"? Why parade testimony of which the Commissioners must say that "it is far from conclusive," and add—"The majority do not see any evidence of a general deleterious tendency in the labour itself; and this," say the Commissioners, "is quite consistent even with an admission that the factory population tends gradually to deteriorate"? Professional testimony obtained and used in the promiscuous manner adopted by the Commissioners must necessarily be valueless, and the witnesses are the persons most aggrieved. Only one noteworthy suggestion comes out of this section—namely, that it would be well if the time of children beginning their day's work could be postponed until after breakfast. The fourth part is devoted to the examination of children by the assistant-inspectors. We altogether distrust the results given in this part. In the measurement of children, it is directed that, in respect to the chest, "in the case of girls the *measurement was to be taken outside the dress*"! Measurements so taken are used throughout the tables, and conclusions therefrom, as of actual value. In respect to weight, it is not stated whether the children were weighed with or without their clothes; but we presume that in the case of girls, at least, the weight includes the clothes. Yet here, again, the results are given in the tables as of positive value. We altogether decline to receive evidence based upon a method of inquiry which admits of such extraordinary laxity. Much of the difference believed to exist in the physical qualities of factory and non-factory children and the children of urban and rural districts possibly existed only in the different minds of the examiners. The investigation was of the hastiest character, and in the quotations given from assistant-commissioners' reports there are curious inconsistencies. One gentleman, in especial, displays a facility of coming to conclusions to say the least suspicious. The one prominent result believed to have come out of the examination is the prevalence of flat-foot among factory children. Is the Assistant-Commissioner in question the discoverer?—and do his returns furnish the principal evidence? He writes glibly of flat-foot and knock-knee among factory children; of bow-leg among non-factory children; of a red and spongy state of the gums of factory children, suggested to arise from deficiency of vegetable food, not a word being said about brothers and sisters fed in like fashion but not working in factories; and so forth. These are only samples of discoveries quoted without comment by the Commissioners. The fifth part of the Report is given to statistical inquiries, and needs no comment. The last part contains the conclusions; and here the Commissioners deal with the subject chiefly from their own observation. On this account their recommendations will deserve and receive attention. They recommend a reduction of the hours of labour for children and women, and especially that this reduction should be made *at the beginning, not at the close of the day*—the working day commencing after breakfast. They would raise also the age at which children first begin work from eight years to nine years. They suggest further that mothers of young infants should either be employed half-time or excluded from factories altogether.

No sooner had we read Mr. CARDWELL's speech in introducing the Estimates than we lent him and an unpopular cause all the support in our power. The goodness or badness of a Warrant has nothing to do with the correctness of a principle; and we do not turn our backs on the position we took up years ago. If anything could make us do so, it would be the new Warrant. The principle on which it is based is good as far as it goes, but it is saddled with conditions that must effectually prevent its working. The State gains a great deal, but the medical officers gain nothing, by that document. As far as the social position and comfort of individual officers are concerned, there cannot be a doubt as to the advantages of the regimental system. Still, we believe that medical officers had become reconciled to what they regarded as inevitable, and were content to accept their new position if they had been treated with the consideration

they deserved. They were led to expect, from Mr. CARDWELL's speech, that in the execution of the reorganisation he indicated existing rights would not be cancelled, and they hoped that promotion after fifteen years' service might be looked forward to with confidence. They searched the new Warrant in vain for any grounds for this confidence, and the Army List that followed the issue of the Warrant soon settled their expectations in the other direction. The opportunity of introducing a new and unpopular, but as we believe a sound principle, has been seized for increasing the medical officer's duties and responsibilities, and for depriving him of certain rights and privileges that he has hitherto enjoyed. In numerous details the authorities appear to have spared no pains to make the new order of things distasteful to medical officers. The more we learn, the firmer is our belief that the medical heads are powerless to effect the changes that are required. The medical officers look to the medical journals and to the universities and colleges to take up their cause and to assist them in gaining what is, not apparently, but really and rightly, due to them. The attempt of the present Government to effect an insignificant saving can only end in their incurring a heavier outlay at no very distant time. The cost of living, the expense of education, and the requirements of examining boards are not diminishing; the number of young men entering the medical profession is not increasing in proportion to the increase of population, while opportunities are opening up for their employment in other walks than those of the public services. The present is scarcely the time to impose fresh duties on medical officers on the one hand, and to diminish the attractions which the service holds out on the other. If concessions are not made, and that soon, it is easy to see what will happen. Young medical men will ask themselves whether it is worth the candle. They will cease to regard the army as offering them any attractions, and this or a future Government will find itself compelled to take new ground in a position less advantageous to them. This lesson has to be learned on the other side of St. George's Channel. Memorials to the War Office from the Irish medical colleges will do nothing so long as the latter supply the necessary number of candidates.

Medical Annotations.

"Ne quid nimis."

THE COLLEGE OF SURGEONS' ELECTION.

THE event has proved that the approaching election into the Council of the College of Surgeons will be of a more exciting character than was at first anticipated. Mr. Quain has, as we expected, declined to seek re-election, and there will therefore be three vacant seats for competition besides that of Sir James Paget, who will of course be returned. For these vacancies there are no fewer than eight candidates, who stand in the following order on the Fellows' Register:—Mr. Francis Hird (1843), Mr. Haynes Walton (1848), Mr. Cooper Forster (1849), Mr. Edward L. Hussey (1849), Mr. John Marshall (1849), Mr. Thomas H. Wakley (1849), Mr. William S. Savory (1852), and Mr. George Southam (1853). Of these gentlemen, Mr. Hird is one of the original batch of fellows made by the Charter of 1843, and stands next in seniority to Mr. Prescott Hewett; all the others are fellows by examination, with the exception of Mr. Southam, who is one of the "ten-pounders" elected under the Charter of 1852 from among members of the College dating prior to 1843.

Mr. Hird is the senior surgeon of Charing-cross Hospital, but has up to a comparatively recent period practised midwifery, which fact would formerly have excluded him from the Council; but the provisions of the Charter of 1852 simply forbid practice "as an apothecary," and when members of the Council have to form part of a board of examiners in midwifery, it may not be unadvisable that one of their number should have a practical acquaintance with the subject. Mr. Haynes Walton is one of the most active members of the surgical staff of St. Mary's Hospital, and has charge of the ophthalmic department of that institution, having been for many years surgeon to the Central London Ophthalmic Hospital. Mr. Cooper Forster is a gentleman well known and appreciated at Guy's Hospital, of which he is one of the surgeons. Mr. Hussey is well known as a practitioner in Oxford, where he is senior surgeon of the Radcliffe Infirmary. Mr. Marshall is Professor of Surgery in University College, and surgeon to University College Hospital. He has recently been elected Professor of Anatomy to the Royal Academy, and is well known in the literary and artistic world. Mr. Wakley is consulting surgeon to the Royal Free Hospital, of which he was for many years surgeon. In justice to Mr. Wakley and ourselves, we think it right to state at this earliest opportunity that, though a proprietor of THE LANCET, he has never taken any share in its direction or editorial management. Mr. Savory is surgeon to St. Bartholomew's Hospital and lecturer on Surgery. He has since 1870 been a member of the Court of Examiners, and was Hunterian Professor of Comparative Anatomy in 1859. Mr. Southam is surgeon to the Royal Infirmary at Manchester and lecturer on Surgery. He is, moreover, President of the Council of the British Medical Association.

THE MARRIAGE OF POTENTIAL LUNATICS.

IT is not often that we are called upon to notice so gross a piece of imprudence, or wickedness, as the marriage of a sane person to an actual lunatic. Still, even this outrage on humanity is not absolutely unknown, as a recent case reminds us; and while our indignant horror is aroused by such an occurrence, it may be useful for the profession to reflect upon a practically much more important question: How far it is justifiable for those persons to marry who, though not themselves insane, belong to families so deeply tainted with the tendency to nervous disease that every member must be considered in danger either of becoming insane himself or of begetting children who will go mad? There are not a few persons, both within and outside the profession, who habitually resent the mere notion of any interference with natural affections, upon problematical grounds, as a gross injustice and impolicy. It will not be denied, however, by any sensible and educated man, that the question is one of degree. No one can doubt that there are some men and some women who, though they have never shown a trace of insanity themselves, are as much bound by moral considerations to abstain from reproducing their species as any declared lunatic would be bound by the prohibition of the law. Who can doubt, for example, that a person, though not himself mad, is bound to remain single if, let us say, he be one of five children by the same parents, the other four having all become insane? A man who concealed such a family history till after marriage would be held to have acted most basely, and to have not

merely exposed his wife to a terrible anxiety on his account for which she was unprepared, but also to have ensured, so far as he could, the birth of children destined to insanity.

The question, then, is only one of degree; and, at the risk of being called visionary, unpractical, &c., especially by the smart young legal gentlemen who write pseudo-psychology for certain weekly papers, we would urge upon the profession the desirability of taking up this subject in a serious manner. It may, for aught we know, prove impossible ever to prevent by law the marriage of persons who are not actually insane in a manner capable of legal proof. But custom and public feeling can do nearly anything in such matters if they be rightly directed; and we beg to suggest a very important duty which the medical profession might perform in connexion with this matter. Let some small group of physicians trained to the business of observing insanity and other nervous diseases, and with large opportunities in that direction, devote their spare time during the next ten years to investigating the family history of the insane and of other sufferers from grave nervous disease in a far more thorough manner than it is commonly done, and to working out a formula of the percentage of probability of insanity or other serious nervous disorder in children born with such and such relationships and placed under such and such necessary circumstances. No doubt this would be a gigantic task; and it is not impossible that the result of ten years' work might be to convince the observers of the impracticability of any such calculation. But even in that case there would be most valuable results of other kinds from the collection of such an important and varied catalogue of facts concerning the inheritance of nervous disease. And supposing, on the contrary, that anything like a calculable ratio of inheritance of insanity and other grave neuroses were made out, its communication to the public, through the medium of the British Association or the Social Science Association, might well be the starting-point of an important reform in a matter as to which there is the strangest ignorance in society. As things stand at present, there is scarcely any medium between the folk that feel a blind panic of even the slightest trace of family insanity and a much larger class who seem to be perfectly ignorant of or indifferent to the perils which are connected with the highly developed neurotic inheritance, and this is neither creditable nor safe.

THE INNERVATION OF THE LACHRYMAL GLAND.

DR. DEMTSCHENKO (Pflüger's *Archiv*, Sept., 1872) has lately conducted a series of experiments with a view of determining the innervation of the lachrymal gland. The animals (dogs, cats, and rabbits) were rendered insensible by morphia. The stimulus applied was an induced current of electricity. The quantity of fluid secreted by the glands when irritated was estimated by the number of square centimetres of blotting-paper that were moistened. Some differences in the mode of experimenting were found to be required in the different animals. In the dog and cat the lachrymal nerve could be reached from the orbit, but in the rabbit the skull had to be opened. M. Demtschenko found that no influence upon the activity of the lachrymal gland was exerted by the temporo-motor branch of the fifth, but the secretion was augmented by irritation of the sympathetic nerve. Irritation of this nerve renders the conjunctiva moister even when the lachrymal gland has previously been excited. The increased flow of tears which follows irritation of various cranial nerves, such as the frontal infra-orbital, nasal, lingual, glosso-pharyngeal, and pneumogastric, is not interfered with by section of the sympathetic, but is immediately checked by section of the lachrymal nerves. Chloroform narcotisation does not prevent the manifestation of this reflex action. The secretion presents some differences, according to whether the sympathetic or the fifth nerve is irritated, being cloudy in the former case, limpid, clear, and abundant in the latter. The sympathetic nerve seems to maintain the normal degree of moisture of the eye, whilst the fifth governs the flow of tears, since in cases of paralysis of the latter nerve the conjunctiva remains moist, but the power of shedding tears is lost. Ligature of the carotid artery materially diminishes, whilst ligature of the jugular vein augments, the flow of tears following irritation of the lachrymal nerve. All conditions producing dyspnœa lead to increased flow of tears.

THE DUKE OF EDINBURGH AT KING'S.

"THESE are imperial works, and worthy Kings," was the not inapt quotation of an eye-witness of last Friday's ceremony, when a royal duke distributed the medical prizes at the College of royal name. The attendance was numerous and *distingué*, including the Duke of Cambridge, the Archbishop of York, Earl Powis, the Bishop of Ely, Sir Thomas Watson, the Principal of the College, the Dean of the Medical Faculty, as well as the medical staff. The Duke of Edinburgh acquitted himself on the occasion with a tact and neatness which the public ought to have more frequent opportunities of appreciating. Nothing is more gratifying than to see the members of the Royal Family taking part in academic or scientific ceremonials. Such lectures as those of Prince Arthur at Woolwich on the art of war, supplemented by that of Colonel Adye's on the Central Asian question, at Marlborough House, under the Prince of Wales's auspices, rob of its sting the disloyal satire so often leveled at the distaste for intellectual questions in high places. The art of war as a theme appropriate to a Court distinguished in its annals is not unsuitably replaced by the art of healing, as a topic congenial to a family whose interest in the well-being of its subjects includes the physical no less than the moral side. *Sanitas sanitatum omnia sanitas* counterbalances as a policy that which in these days fulfils itself in "bloated armaments" and destructive campaigns. Our profession supplies the rank and file as well as the officers of that great sanitary service, and it is as much in keeping with the domestic duties of the Royal Family that it should preside at the distribution of prizes at a medical school as it is with its imperial duties that it should award similar honours at a military one. *Au reste*, it was well that King's College had so satisfactory an appearance to make before its august visitors, and that the roll-call of distinguished prizemen should have been answered so effectively from an increased number of competitors.

FEES OF MEDICAL WITNESSES.

IF such a transaction as that graphically detailed in THE LANCET of the 24th of May, by Dr. Steele, of the Workhouse Hospital, Liverpool, had happened anywhere but in a court of justice, it would have brought great discredit on the responsible parties. As it is, we shall do our part to expose what we take to be a proceeding as illegal as it is unjust. Dr. Steele was subpœnaed as a witness in the Court of Passage, Liverpool. He attended for seven hours a day for seven days. To every inquiry he made he was told, "the cases are short, yours is coming on next." At last, on the seventh day, the case did come on. On going into the witness-box, he told Mr. Attorney-General Pickering that he had received no fee, and objected to give evidence until he was paid for attendance. Thereupon the plaintiff's counsel coolly told him that his evidence would not be required, and consequently he re-

ceived no payment. We shall not further characterise this "practice." The fee for a medical witness in the Court of Passage is a guinea a day, and reasonable expenses should be tendered to him when he is served with the subpœna. In civil cases he cannot be attached for declining to give evidence unless these charges are paid or tendered. But the objection that he has not been paid must be raised before he has been sworn. In criminal cases, it is true, no tender of fees is necessary, except in cases in which a witness living in one distinct part of the United Kingdom is subpœnaed to attend in another. In that case he is not liable to punishment for disobedience of the process, unless at the time of service a reasonable and sufficient sum of money to defray the expenses of coming, attending, and returning has been tendered. The law clearly considers that the witness should be paid a reasonable sum when subpœnaed. What shall we say then of the legality or fairness of keeping a medical witness in attendance seven hours a day for seven days and then answering his demand for fees by doing without his evidence! Dr. Clarke, of Blackhill, and Dr. Steele deserve the thanks of the profession for the stand they have made in this matter, and their example should be imitated.

HEALTH OF THE KHIVA EXPEDITION.

THE forethought of the Russian Government in the treatment of its soldiers—"children of the Czar"—are favourably displayed in the admirable medical and hygienic arrangements of the army now marching on Khiva. British military surgeons will probably be surprised to learn that in the Turkestan division, comprising the Dahisak and Kazalin columns (the former consisting of 4687 and the latter of 2352 men), although it had suffered severely from snow, rain, and cold, there were, up to the 15th April, but twenty-five cases of sickness, twenty of these belonging to the Dahisak column. When we consider the nature of the country through which the troops marched, and the scarcity of water, this immunity from disease appears remarkable. It is due, however, to the sanitary precautions taken, and the rigid supervision exercised in everything pertaining to the health and well-being of the soldiers. Attached to the Turkestan division are fourteen doctors, one veterinary surgeon, one apothecary, and twenty-nine medical assistants (including dressers and dispensers). A certain number of camels are reserved exclusively for the use of the sick and wounded. One noteworthy feature in the dietetic *régime* of the expedition is the substitution of tea for spirituous liquors, the latter being only given when the medical officer considers alcoholic stimulants absolutely necessary. We shall be anxious to know how far this arrangement meets the consent of the men. Whatever its advantages may be, we fear it would prove unpalatable to our own soldiers.

THE ADULTERATION ACT.

THE recent decision at the Court of Queen's Bench in the case of Fitzpatrick *v.* Kelly, heard before no less than three judges, is one which the public have reason to hail with the utmost satisfaction. If this judgment be maintained it will remove the one great difficulty which has hitherto frustrated most of the efforts made to enforce the Act—namely, the presumed necessity to prove a guilty knowledge on the part of the seller—an impossibility in most cases. This, it is now ruled in what may be termed the Liverpool great butter case, is not required by the Act in question. The one great principle held in view by the judges in coming to this decision was that articles sold should be what they really profess to be in the names by which they are sold; so that when a purchaser asks for butter he has a right to be supplied with that article and nothing else. This is a plain principle of common fairness and honesty, and it is one for which we have strenuously contended in the Reports of THE LANCET Analytical Sanitary Commission for more than twenty years past; we have therefore no little satisfaction in finding that the justice of this principle has been at length acknowledged by such high legal authority.

This righteous judgment is a real gain to the public, and it strengthens greatly the hands of those who are striving to render the Adulteration Act effective. The immediate effect of the ruling of the Judges in the case in question is to refer it back for hearing to the magistrate before whom the case was originally brought, and before whom we anticipate a second break-down; for while few things are more common than the adulteration of the cheaper kinds of butter, nothing is more difficult to establish by scientific proof and evidence.

We are glad to see that this Act has recently been brought to bear with effect on the adulterators of bread with alum. This adulteration has long been punishable by law; but, some way or other, few convictions have taken place of late years for this sophistication of the staff of life. Let us now hope that for the future no week will be allowed to pass by our analysts without convictions being obtained in our law courts against those guilty of so injurious an adulteration.

INFANTICIDE.

A PAPER on this subject, by Mr. F. W. Lowndes, of Liverpool, was read at the Social Science Association on Monday evening last. Statistics showing the number of inquests on new-born children in Liverpool were given, to demonstrate the importance of adopting some means for putting a stop to child-murder. Mr. Lowndes goes beyond the recommendation that none but duly-qualified midwives should be allowed to practise—he thinks they ought also to be subject to an annual licence to practise, the renewal of such licence to be contingent on satisfactory proofs of character and capacity, and that it should be immediately forfeitable by neglect or misconduct. The practice of midwifery by unlicensed persons he held should be punishable by heavy fine or imprisonment. Upon these points a lady who was present, speaking as a midwife, expressed herself in a manner as becoming as it was forcible against the adoption of such a "ticket-of-leave" system as was proposed by the author of the paper, and protested against the ever-recurring but utterly unfounded assumption that concealment of birth, fraud, or foul-play, would be put down by regulations referring exclusively to midwives. The compulsory registration of all births, whether of living or dead infants, was advocated, Mr. Lowndes going so far as to propose that notice of birth should be given to the registrar within forty-eight *hours* after its occurrence, the time proposed by the new Registration Bill being forty-two *days*! We suspect that the wide difference between these two periods arises from an insufficient allowance in the first for practical difficulties which are officially recognised in the longer time allowed by the Bill. If the limit of six weeks errs in one direction, as we are inclined to think it does, assuredly Mr. Lowndes has gone to the other extreme in his limit of two days. The suggestion that the penalty clause for any neglect to give notice of birth should comprise a reward to the informer or prosecutor was, in our judgment, rightly condemned by Mr. Safford, whose experience in criminal law led him to look with abhorrence upon any attempt to resuscitate the hateful class of "common informers." Further suggestions tending to show how the condition of single pregnant women might

be ameliorated, and the desirability of collecting adequate data in relation to still-births, were comprised in Mr. Lowndes's paper, which, on the whole, was less interesting than it would doubtless have proved had the author been present at the meeting.

THE INFLUENCE OF VARIOUS SUBSTANCES ON THE REFLEX EXCITABILITY OF THE SPINAL CORD.

DR. S. MEIHUIZEN gives, in Pflüger's *Archiv* (Band vii., Heft 4 and 5), the results of a series of experiments he has made on the effects of various agents on the reflex irritability of the spinal cord. The animals were chiefly frogs, and the disturbing influence of the brain was removed by section of the cord below the medulla oblongata. The test of the degree of irritability of the spinal cord was in most instances very dilute (½ per cent.) sulphuric acid, which was applied to the surface of the skin at intervals of a quarter of an hour, and the time before contraction occurred noted. Meihuizen finds that *bromide of potassium* rapidly depresses the excitability of the spinal cord, and ultimately entirely abolishes it, and he gives certain experiments which show that it is not due to the action of this salt on the periphery, or on the nerve-cords, but upon the cord itself. The *salts of zinc* have a similar action. He considers the acetate might properly be regarded as a narcotic. *Chloral hydrate* lowers the reflex activity, and its action is also central. Experiments with *strychnia* brought out the curious fact that whilst the nerves and muscles become highly sensitive to *mechanical* irritation, there is no material increase in their reaction upon the application of chemical stimuli. *Quinine*, even in moderate doses, rapidly diminishes, and ultimately extinguishes, the reflex activity of the cord, but this action is apparently not direct, but in great measure indirect, through disturbance of the circulation and arrest of the heart's action. *Alcohol* (10 per cent.) first and for a long time greatly lowered and then exalted the irritability of the spinal cord. *Caffein* rapidly lowered it (½ c. c. of 10 per cent.), almost entirely abolishing it in four hours. *Morphia* first depressed, then exalted, and finally abolished the excitability of the cord. *Digitalis* has no influence on the spinal cord as a centre, but it acts as a depressant upon it, through its action on the vaso-motor system.

FEMALE MEDICAL STUDENTS.

THE notices from the *Birmingham Daily Post* of June 6th and 7th convey an imperfect account of what has taken place in reference to the above question, and consequently lead to incorrect conclusions as to the true feelings of the majority of the Professors. We understand the real state of this question to be that the Professors in the first instance unanimously recommended the Council to admit women. "They deemed it advisable, however, that women students should be taught in separate classes, and should be provided with a separate dissecting-room." In other words, this resolution, which took the place of the original one submitted "to admit women without any restriction at all," really meant that the Council of the College might establish a medical school for women, but they must do it with separate classes and separate professors—an impossibility. The answer to this on the part of the Council, as doubtless was contemplated by the mover and seconder of the resolution, Mr. Pemberton and Mr. Clay, was, "That the Council, whilst fully recognising the right of women to occupy any field of employment for which they may deem themselves qualified, and desirous to afford any facility in its power towards the higher education of women, consider that it cannot under its existing arrangements conveniently admit female students to any of its departments, and is not prepared at present to make such alterations as the admission of female students would require." On this followed the public meeting of ladies at the "Plough and Harrow" (*Daily Post*, June 4th), and the meeting of Professors on the 5th, with Mr. Bracey's resolutions.

The amendment, which was moved by Mr. Pemberton and seconded by Mr. Clay, and which was carried by 12 to 7, whilst it appeared to simply support the conclusions at which the Council had arrived, as a matter of convenience, was really based on the conviction that the contemplated admission of women students into the Queen's College meant the dismemberment of the institution.

HOSPITAL SUNDAY IN IRELAND.

THE leading Dublin organ—the *Evening Mail*—advocates in an eloquent article the extension of the Hospital Sunday movement to the sister island. After eulogising the success of the scheme in England—"a conspicuous feature," as it justly remarks, "in the philanthropic annals of the year"—and remarking on the advantages which will flow "from this binding together of labour and religion," the *Evening Mail* asks, "Are we to accept it as impossible that Dublin can ever be the scene of a Hospital Sunday?" The great obstacle, it seems, to such a consummation is the denominational feeling—the *odium theologicum*—still rampant in Ireland. Public men preach on the platform and write in the press of "the union of Irishmen in heart and hand." Now, however, has come the practical test in the hospital collection. The mode of collection could be so easily put on an equitable basis that resistance to the scheme must be ascribable only to denominational partiality for its own particular institutions. Last year, however, an attempt to promote the Hospital Sunday movement, in which, says the *Evening Mail*, "a young physician, since dead and much lamented, nobly exerted himself, broke down through the nonconformity of the head of the Roman Catholic Church in Dublin." The six months that have elapsed since then will, the *Evening Mail* hopes, have caused the prelate to change "his mind." If not, then all who can afford to act without his Eminence's sanction should open their churches and chapels to subserve the Hospital Sunday movement, and so secure for the Dublin infirmaries a yearly subsidy expressive of the public sense of their value. Such a Sunday in such a city would be a higher example of toleration and a more effective homily against bigotry than any amount of platform denunciation or journalistic satire.

THE HEALTH OF THE NAVY.

THE outbreak of enteric fever that has recently occurred in the Flying Squadron adds one more chapter to the history of preventable diseases afloat. The crews of the *Narcissus* and the *Doris* were stricken with fever solely because the water obtained from Vigo was decidedly bad. The *Endymion* was fitted with Captain Crease's patent tanks (which tanks we took occasion to review favourably some three months ago), and her men escaped. Condensed water was used in the *Aurora*, and her crew were not at all affected. The ventilation in all the ships is described as "fairly" good, but recent unofficial investigations have shown that, comparatively speaking, very little attention is paid to the purity of the air in Her Majesty's ships below the water-line. All who have served on the *Monarch* know that, even in temperate latitudes, her lower deck and store-rooms were hardly habitable, and, of course, far from healthy; but as she has just been recommissioned, it is to be hoped that during her long stay in Portsmouth dockyard some of these defects

have been remedied. It has been suggested by a contemporary that all naval medical officers serving afloat should be furnished with the means of making a chemical and microscopical examination of water and other dietetic articles. Inasmuch as a chair of naval hygiene has now been instituted at Netley, it is to be presumed that the necessary apparatus has been already supplied to the surgeons of all ships on active service, for it is manifestly absurd to instruct officers in a special branch of scientific knowledge unless they have subsequently the means of applying that knowledge for the practical benefit of the men committed to their charge.

SCOTTISH METEOROLOGICAL SOCIETY.

IN the House of Commons Mr. M'Laren recently drew attention to the fact that whereas the Meteorological Committee of the Royal Society received £10,000 a year from the national purse, the Scottish Meteorological Society was compelled to depend on voluntary subscriptions. He thought that as the latter Society afforded considerable assistance to the former, it ought to have a share in the grant. The Treasury Secretary quite admitted the desirableness of co-operation between the two Societies, but said it would be "inconvenient" to have two votes of this character in the Estimates, and there the matter dropped. If we may judge from the tenor of a correspondence which was recently printed and circulated, the relations between the two bodies referred to are not of a nature to promise much in the way of co-operation. On the contrary, the Scottish Society not only complained, surely with fair reason, that the small aid for which they ask is withheld, but that "a portion of the Government grant is now employed in obstructing and undermining the Scottish Meteorological Society." The allegation is distinctly made that the English Committee have acted in direct violation of a written agreement into which they had entered not to communicate with the Scottish observers except through the Council of the Society, who naturally do not like such poaching on their preserves. One would suppose it not impossible for two scientific bodies like the English and Scottish meteorologists not only to coexist without distrust of each other, but to pursue their most useful labours in harmony. To this end the wise maxim "bear and forbear" needs to be observed on both sides, and especially on that which occupies the vantage ground of Government support.

THE INGHAM INFIRMARY, SOUTH SHIELDS.

TUESDAY, the 3rd of June, will be henceforth a historical day in South Shields. The Ingham Infirmary was opened on that day by Alderman Williamson, who has contributed in a princely way to the completion of the undertaking. It is proposed at present to have only 21 beds, but there is ample room for more should they be needed. The style of architecture is said to be a modification of what was common in the time of Queen Anne. The Mayor of South Shields (Alderman Glover) presided. There has seldom been such a turn-out of the population of the town as on this occasion, including volunteers, benefit societies, the corporation, &c. Those only who know what is included, by the South Shields mind, in the name of Robert Ingham, Q.C., the son, by the way, of an eminent Newcastle surgeon, and for twenty-five years member of the borough, will understand the suitableness of this mode of testifying local regard for him and commemorating his name and character. Mr. Ingham will live long, not only in the memories, but in the hearts of the people. If this institution is conducted in the spirit in which he has lived, it will indeed be a kindly refuge for the sick. At the lunch subsequently, the Dean of Durham, in proposing the toast of the day, gave a most just account of Mr. Ingham's career and character, and of the secret of his influence through a life which has not been short, and which, we hope, will yet be much longer.

LORD DERBY ON CHARITY.

THE distribution of relief is one of the most difficult of social problems, and we are proportionately grateful to Lord Derby when he devotes his practical mind to its solution. Presiding at the annual examination of the Manchester School for the Deaf and Dumb, on Monday last, he reminded his audience that the task of our great hospitals in discriminating the deserving from the undeserving applicant was no easy one, and that its occasional nonfulfilment was no reason for the public ceasing to be a liberal subscriber. The principle that guides the officers of these institutions is simply this: that of two candidates for admission, that one shall be first admitted who can show at once the most urgent want, and the most reasonable prospect of benefiting by the care bestowed. The artificial production of pauperism is of course a vexing evil; but it is better to allow obtrusive pretence to reap an undeserved advantage, than to run the risk of withholding from modest and genuine want its merited dole. The education of the community, and its better discrimination between the false and the true, is in this, as in other social problems, the consummation which must be accelerated.

A LONDON MEWS.

THE sad catastrophe that recently occurred in Grosvenor-mews suggests reflections on a state of things at once a shame and disgrace to our boasted civilisation. Without an actual inspection it is impossible to conceive the wretchedness of some of the habitations in an ordinary mews, especially in the poorer parts of London. There are thousands of persons living in chambers above damp and offensive stables, the approaches to which are generally by narrow, ill-paved, and badly-drained streets. These chambers—for there are sometimes two for a family—are generally low and ill-ventilated, smelling strongly of the decomposing matter below. It is here that many parturient women lie for days and weeks at the most critical period of their life, here the sick pass through the most dangerous illnesses and complete their convalescence, and here the young of delicate and ill-nourished mothers are reared. With such faulty hygienic conditions it is not surprising to find great moral depravity, for it is very certain that bad sanitation exerts an evil influence on the habits of the people, and good roomy houses, allowing of decent segregation of the sexes, will do more good for this class of persons than any number of Acts of Parliament or City missionaries. It is really time that active steps should be taken for the improvement of the dwellings of the poor.

SMALL-POX IN JAMAICA.

ACCORDING to the *Colonial Standard* of May 10th, the small-pox, after ravaging the country districts for months, has at length invaded Kingston, and, as usual, finds itself unopposed by the authorities. No adequate small-pox hospital is ready, and the public vaccinator is thinking of testing his lymph. The Government has done one thing: a tax of 3½*d.* in the pound on all rateable property has been imposed. By the time half the people have had the small-pox, perhaps, proper provision will be made for isolating patients, and a good machinery for carrying out vaccination and revaccination will exist on paper. The au-

thorities are the more to blame in that they have been persistently for months implored by Dr. Bowerbank to set their house in order and protect Kingston from this most horrible and most preventable of diseases. Two things are certain: one is that small-pox will spread and kill and disfigure extensively in the community if it is not prevented; the other is that vaccination and revaccination are the only but very effective means for protecting individuals, coupled with efficient resources for isolating actual cases of the disease. The community should, with or without the help of the Government, see to the vaccination of all unvaccinated children, and the revaccination of all above ten, or even a less age, if the vaccination marks are few or faint.

FOREIGN BODY IN THE BRONCHUS WITH OBSCURE SYMPTOMS.

ON the morning of Sunday, April 13th, a child, aged two years, was admitted into St. George's Hospital, who had just before swallowed a bit of tobacco-pipe stem. The child did not appear distressed, its voice seemed natural, and there was no paroxysmal cough. Digital examination failed to detect any foreign body, and air entered both lungs. Next day the child's breathing was laboured, its diaphragm acting violently, and the intercostal spaces being drawn in at each inspiration; air entered both lungs freely, but everywhere the expiratory murmur was prolonged, and a peculiar thrill was present over the left lung. There was much mucous expectoration, but the colour of the child was good. On Tuesday, April 15th, Dr. Barclay examined the patient, and found the breathing sonorous, the voice natural, and both lungs filling at each inspiration. He inclined to the belief that a foreign body was present in the air passages. Mr. Pollock advocated tracheotomy should the symptoms increase, and proposed to perform it the following day unless they were modified. Late on Tuesday night, although the child's colour was good, the violent diaphragmatic inspiration was increasing, and the breathing becoming more laboured. Mr. Pick opened the trachea, passed a probe down, made every possible search, but detected no foreign body. The symptoms were not relieved by the operation. On Wednesday there was little or no difference in the child; warm applications were made to the chest, a tracheotomy tube kept in, and the surrounding air moistened with steam. Subsequently the child grew feebler, until it died on Tuesday, April 22nd. The autopsy the following day revealed a piece of tobacco-pipe stem, about an inch in length, lodged in the commencement of the right bronchus, so that its upper end rested on the left side of the trachea, at a spot which was ulcerated. The lungs were in part congested and consolidated. Such an impaction fully explains the almost symmetrical respiratory sounds, and accounts for the forced inspiration, whilst it shows the possibility of a probe passing into, but not detecting a foreign body at, the bifurcation of the trachea.

PROF. GAIRDNER ON CRIMINAL INSANITY.

THE law, it has been remarked, is adopting towards medico-psychology the attitude assumed by the church to geological science. Jealous of interference with its prerogative, it ignores in criminal trials the doctrine of moral insanity, and frequent conflicts between counsel and medical witnesses are the result. An important contribution to the adjustment of this *quæstio vexata* has just been made by Professor W. T. Gairdner, of Glasgow. He is less uncompromising than Drs. Maudsley and Russell Reynolds in asserting the claims of medico-psychology. How can insane impulse to crime be possibly discriminated in all cases? Law cuts us off from considering the motive, and affirms that a crime is a crime, even if committed without a motive. Psychology maintains the existence of insane impulses to theft or murder, distinguishable only, if at all, through the analysis of motive. Discrimination, thinks Dr. Gairdner, is simply impossible. Practical expediency ought to be our only guide, and hereditary or acquired insanity can at best be taken into account in judging of degrees of criminality.

NURSING IN HOSPITALS.

THE authorities of the Westminster Hospital have recently taken an important step in advance with respect to the nursing of their patients. Miss Merryweather, of Liverpool, whose devotion to the sick poor is proverbial, with a staff of trained nurses, has been entrusted with the management of the nursing, and with power to weed out the inferior nurses and replace them by properly educated ones; and so far the result has been very satisfactory. It is, moreover, intended to establish a nursing institution in connexion with the hospital, so that vacancies may always be filled by nurses trained in the institution. If such measures were universally adopted, not only would a great hindrance to the usefulness of our hospitals be removed, but a desirable efficiency would be gained by obtaining nurses educated and discriminating, but withal implicitly obedient to the dictates of the medical officers. This is the consummation of woman's part in the healing art; and if many females who aspire to the higher honours in the profession could be made to realise this fact, they might confer unequivocal benefit on suffering humanity.

THE DRUITT TESTIMONIAL FUND.

WE publish in another column the proceedings of a meeting of the General Committee of the above fund. The Druitt Testimonial has been a success, of which any man might well feel proud. Dr. Druitt has been before the public for many a long year. His name has become a household word in connexion with his Manual of Surgery, and he has, as a sanitary reformer and journalist, done good service in his time. The occasions must have been many in which he has had to criticise and oppose the views of others, and his great and deserved popularity bears witness to the reputation he enjoyed for integrity of purpose and kindliness of disposition. We cordially join with his many friends in their expression of sympathy with him in his illness and hopes for his speedy restoration to health.

CALCUTTA MEDICAL COLLEGE.

THIS institution closed its thirty-eighth session on Saturday, May 4th, in the University hall. The English, Bengalee, and Hindoo departments are under efficient professors supplied by the Indian Medical Service, assisted by six Hindoo and Mahomedan lecturers. These three sets of classes consist of 1226 students, who have access to a hospital admitting within the year 41,093 patients. This hospital is one of four on a similarly large scale, while there are many asylums and dispensaries in the city and in the Presidency. Within the last twenty years the Fever Hospital has cured or relieved 800,000 patients, chiefly natives or the lowest class of Christians. Since 1861 the students, many of them Mahomedans, have increased from 409 threefold, and the fees from £184 to £3071 a year. In 1836 there was but one "subject" for dissection, in 1872–73 there were nearly nine hundred. The native Indians make excellent surgeons and physicians, and under such teachers as Fayrer, Chevers, Smith, the Macnamaras, and others, their progress is rapid. Baboo Kannaye Lall Dey and Moulvie Tameez Khan are favourable specimens of the native staff. The subordinate grades of the medical service are supplied from

the College, which may also one day provide surgeons for the native regiments, if Lord Northbrooke's reorganisation of that service be pushed to its natural issue.

ROYAL COLLEGE OF PHYSICIANS.

AT the meeting of the College held on Monday last the question of the present position of the army medical officers as affected by the new Warrant was brought under the notice of the fellows in a communication received from one of the Irish bodies. The President stated that he had applied to the Director-General of the Army Medical Department for information, and had received a reply to the effect that the matter had been submitted to Mr. Cardwell, and upon the receipt of his answer a communication would be sent to the College.

It was also stated that a case had been drawn up for submission to the standing counsel of the College as to the right of the licentiates of the College to recover specially for medicines supplied to patients, as apparently provided for by the Charter of the College, but denied by certain County Court judges is recent actions.

The second report of the Committee of Reference of the Conjoint Examination Board was submitted and discussed, but some special observations upon the point will be found elsewhere.

THE CLEVELAND-STREET WORKHOUSE.

AMONG the many disastrous steps that have been taken by the Local Government Board under the auspices of Mr. Stansfeld, the recent annexation of the Cleveland-street Workhouse as a supplemental asylum to the Highgate Infirmary is one of the most irrational and mischievous. Surely our readers have not forgotten the old Strand Workhouse, which our Commissioners described in 1865 in terms which aroused public indignation at the idea of its being employed as a residence for the sick. As Mr. Pearse said at the St. Pancras Board the other day, the place is "not fit for a rat to live in"; and there can be no doubt that, if again used as an infirmary, it will quickly be found uninhabitable, and a new and costly building must be erected in its place, while at the same time there are excellent new sick wards in the Westminster Union Infirmary, which are not half full.

PARLIAMENTARY PETITIONS AND THE MEDICAL BILL.

FROM the Twentieth Report of the Select Committee of the House on Public Petitions we gather that the total number of petitions against Mr. Headlam's Bill is 99, and the total number of signatures 4657; the total number in its favour is 68, and the total number of signatures 642. The Reform Committee may now be convinced of the truth of our representation that the profession has no interest in such a poor amendment of the Medical Act as Mr. Headlam's Bill. The second reading is fixed for the 26th of July. Of course this is tantamount to the death of the Bill, which indeed has never had any life in it. It is to be regretted that the Reform Committee have not more accurately perceived the necessities of the case and the feeling of the profession.

ARTIFICIAL FRACTURE FOR SHORTENING LIMBS.

FROM a paper read by Prof. Rizzoli before the Medical Society of Bologna, we learn that he has recently had a fourth successful case of this kind in a girl of thirteen. The patient had had inflammation of the cotyloid cavity when one month old, and the head of the left femur became dislocated. At the age of thirteen the left limb was so short that, when standing, the great toe hardly reached the ground. Prof. Rizzoli, with his ingeniously constructed osteoclast, fractured the right femur, and caused the fragments to ride to such an extent as to equalise the two limbs. Union took place in twenty days, and the patient rose from bed after the fifth week. Full details are given in the paper as to the management of the osteoclast (a figure of which is given) and the mode of performing the operation.

When all the risks of such an operation are fairly taken into consideration, it may be asked whether a high heel on the shorter limb may not be the more sensible and secure contrivance.

THE FIRE AT THE ALEXANDRA PALACE.

Two of the men who were injured by the fire at the Alexandra Palace are progressing favourably; but the condition of Larder, who, in addition to being extensively burnt, has sustained a comminuted fracture of both bones of the right leg, is somewhat more critical. Up to the time of going to press, however, no reactionary symptoms had set in, and the patient was not suffering much pain.

THE King's College Hospital Old Students' Dinner took place at Willis's Rooms on June 6th, when there was a very large attendance of past students. The chair was taken by Mr. Wood, who was supported by Sir William Fergusson, Dr. Barry, Dr. Johnson, Mr. Henry Lee, Mr. Heath, Drs. Elin (Hertford), Meadows, Rutherford, Fenn, Kelly, Oxley, Playne, Anstie, Buzzard, Walters, and Messrs. Henry Smith, Bellamy, Mason, W. J. Smith, Napper, Teale (Scarborough), Bell, Bond, &c. The various toasts were received with great enthusiasm, and a very pleasant evening was enlivened by some excellent glee-singing by some old King's College men, ably conducted by Dr. Lavies.

WE understand that a series of special lectures will be given at St. Mary's Hospital Medical School, at 3 o'clock on Wednesday afternoons, during June and July, by the consulting officers of the hospital, as follows:—June 18th: Mr. White Cooper, "Recollections of eminent Surgeons and of past Ophthalmic Practice." June 25th: Dr. T. King Chambers on "Hypochondriasis." July 9th: Mr. Samuel Lane on "Tertiary Syphilis, or the Syphilitic Cachexia." July 16th: Dr. Sibson, F.R.S., on the "Influence of Abdominal Distension upon the Function of the Heart and Lungs." These lectures are open to all qualified practitioners and students of medicine.

AN inquest was held at Stratford, Essex, a few days ago, on the body of a man who died while taking a vapour bath in the public bath-rooms of the locality. The temperature of the bath at the time of the occurrence was not, according to the evidence of the proprietor of the rooms, above 110°, but Drs. Whitehouse and Kennedy, who had examined the body soon after death, expressed their belief that it could not have been less than 200°. The jury returned a verdict of "Death from coma, accelerated by the use of an overheated bath."

WE are requested to state that the paragraph in our last issue referring to "The Priory," at Roehampton (at one time the residence for nearly forty years of Lord Justice Knight Bruce), is altogether incorrect. The paragraph was copied from a weekly contemporary.

THE committee appointed to arrange the erection of a monument to the late Baron Liebig comprises the United States' Minister at Berlin, Mr. Bancroft, and Messrs. Darwin, Russell, and Dove. Subscriptions should be sent to the committee-office at Berlin Doronthenstrasse, 10.

THE annual *conversazione* of University College was held on Wednesday evening last, when the spacious rooms and halls were filled to overcrowding by members and friends of the College, between two and three thousand invitations having been accepted. The entertainment consisted of excellent instrumental music by the Coldstream Guards' band, the singing of glees by the members of the College Musical Society, and the exhibition of several scientific apparatus.

A DEPUTATION consisting of members of Parliament and manufacturers waited upon the Home Secretary on Tuesday last with reference to Mr. Mundella's Bill for limiting the hours of labour in factories. They were strongly against the proposed reduction, and urged that the operatives themselves did not desire any curtailment of their work hours. Mr. Bruce did not, however, consider that any change in the Bill was desirable.

DURING the month of May the city analyst of Dublin made 76 examinations of food and drink. Of 36 samples of coffee, 24 were adulterated with chicory and burnt sugar; the quantity of diseased meat condemned amounted to 23,000 pounds weight, whilst 250 pounds of bad fruit and vegetables were seized, and 150 pounds of spurious tea were destroyed. Fines from 15*s.* to £10 were imposed, but in no case was imprisonment substituted for a fine.

THE *Standard* says that a Norwegian vessel arrived in the river on Saturday last with a sick seaman on board, and hauled into the Surrey Commercial Docks. The man was removed in a cab to Greenwich, was refused admission into the Greenwich Hospital because the case was one of small-pox, was driven back to Rotherhithe, and was eventually taken to the Stockwell Small-pox Hospital, where he now lies in a bad state.

AT a late meeting of the Woolwich guardians, it was decided that the drugs for the infirmary and dispensary should be purchased at two separate establishments, and that a report should be brought up by the medical officers at the end of three months, stating which supply had been found most pure and efficient. It is a very difficult task that the guardians have given their medical officers.

THE Metropolitan Hospital Sunday collections will range over a wide area, embracing (amongst other comparatively distant places from town) Foot's Cray, Bickley, Bromley, Cheam, Chislehurst, Brentwood, Wallington, Hersham, Long Cross, Pinner, Reigate, St. Mary Cray, Uxbridge, and (we believe) Windsor.

AT a general meeting of the subscribers to the Children's Hospital, Bristol, held on Wednesday last, the following resolution was carried by 72 votes to 17:—"That medical and surgical appointments to the hospital be henceforward open to lady candidates."

MR. JOHN MARSHALL, F.R.S., Professor of Surgery in University College, London, was on Tuesday evening last elected by an unusually large number of votes a member of the Athenæum Club.

SINCE our notice of the epidemic in the surgical wards of Charing-cross Hospital there has been no evidence of its further spread. Many of the cases attacked are now convalescent, and none are going on unsatisfactorily.

AT a late meeting of the Whitechapel Board of Works Dr. Liddle reported that from the 1st April 37 cases of fever had occurred on the south side of Royal Mint-street.

WE are glad to learn that the difficulties experienced by the Committee of the Dental Hospital in securing larger and more commodious premises for the institution have been overcome. A suitable building has been obtained in Leicester-square, with a prospect of possession on the 24th inst.

THE Registrar-General's Report for Ireland for the year 1872 gives the number of births registered during that period as amounting to 149,292, affording a ratio of 1 in every 95·96, or 2·78 per cent. of the estimated population, and the deaths to 97,577, affording a ratio of only 1 in every 55·01, or 1·82 per cent.

DR. THURNAM has sent his valuable and, as regards the earlier series, unique collection of British crania to Cambridge. They are being arranged by Professor Humphry in the Anatomical Museum, where they will be accessible to those who desire to see and study them.

MR. THOMAS BOND, F.R.C.S., and Gold Medalist in Surgery at the B.S. examination in 1866, has been elected Assistant-surgeon to the Westminster Hospital, in the vacancy caused by Mr. Barnard Holt's retirement.

THE mortality last week in London and twenty other large towns was at the rate of 22 deaths annually to every 1000 of the estimated population. In the metropolis a fatal case of choleraic diarrhœa in a child was recorded.

CHEMISTS will be glad to hear that Watts' Chemical Dictionary is about to be supplemented by an additional volume, bringing the work up to the latest results of science.

THE Lectureship on Physiology in the Medical School, Surgeons' Hall, Edinburgh, is now vacant. Application should be made to the secretary of the school.

AMONG the recent matriculants at the University of Zurich were twenty-one ladies, of whom eleven belong to the Faculty of Medicine and ten to the Faculty of Philosophy.

THE infirmary opened at Wigan last week by H.R.H. the Prince of Wales is to be called the "Albert Edward Infirmary."

THE METROPOLITAN HOSPITAL SUNDAY.

A SPECIAL general meeting of the Council of the Metropolitan Hospital Sunday Fund was held at the Mansion House on Friday, the 6th inst., in anticipation of the forthcoming Hospital Sunday, appointed for the 15th of June, throughout the whole metropolis; the Lord Mayor presiding. There were present, among others, Sir Anthony Rothschild, Bishop Claughton, Sir William Gull, the Rev. T. J. Rowsell, Mr. Jabez Hogg, the Rev. G. F. Kitto, Dr. Glover, Sir Francis Hicks, Mr. Thomas Turner, Mr. Charles Reed, M.P., the Rev. W. Tennant, Mr. Arthur Currie, Mr. E. H. Currie, the Rev. Canon Oakley, the Archimandrite Morphinos, Mr. Octavius E. Coope, the Rev. Dr. Sadler, the Rev. Dr. Allon, the Rev. Robert Maguire, the Rev. Marmaduke Miller, the Rev. Dr. Kennedy, the Rev. Dr. Rigg, Mr. E. H. Scott (banker), Mr. R. B. Martin, the Rev. Walter Morrison, Mr. Herbert Brooks, the Rev. William Rogers, Mr. S. H. Walrond, Mr. Brudenell Carter, the Rev. Thomas Newton, the Rev. J. A. Porter, the Rev. Dr. Finch, Mr. Edward Thornton, the Lady Mayoress, the Dowager Marchioness of Lothian, and the Hon. Miss Stanley.

A Report of the Sub-Committee was read at the outset by Mr. R. B. Martin, one of the honorary secretaries, stating that an application had been made to his Royal Highness the Prince of Wales to attend the service in St. Paul's, but

that his Royal Highness would be unable to be present, owing to absence from London. The Report went on to state that the total number of assenting ministers of all religious denominations to the forthcoming Hospital Sunday amounted to over 850, and that the number was being daily augmented.

The LORD MAYOR stated that the number of adhesions to the movement referred to scarcely represented the amount of public sympathy with it, or the promises of support the Council had received, inasmuch as a very large number of ministers had represented in effect that their arrangements had been previously made for this year, but that in future years, if spared, they would heartily co-operate. For himself, he had scarcely expected any other result on the first occasion. He added that the refusals to co-operate, for various reasons, scarcely exceeded 50 out of 2600 applications that had been made to ministers of religion within a radius of twenty miles from St. Paul's. Referring to the recent collection of £183 in aid of the fund among the parishioners of the Rev. Canon Miller, at Greenwich, the Lord Mayor said he thought it very satisfactory as a beginning. He read a letter from the Lord Chamberlain, stating that her Majesty the Queen would be graciously pleased to patronise the special service at St. Paul's on Hospital Sunday. Two services would be held in St. Paul's Cathedral on Hospital Sunday, and in the afternoon he hoped himself to attend in state in his official capacity, accompanied, he trusted, by the members of the Court of Aldermen, the sheriffs, and the high officers of the Corporation.

The Rev. Mr. ROWSELL moved the adoption of the Report of the Sub-Committee, and suggested that if any present at the meeting knew of friends who were likely to be absent from London on Sunday, the 15th of June, they might well use their influence to induce them to contribute beforehand to so humane and noble a movement as the Hospital Sunday. Whatever might be the result in a monetary sense, he was convinced the tendency of the movement would be to deepen their common faith and the feelings of brotherhood and benevolence.

The Rev. Mr. KITTO seconded the motion, which was then put and carried.

Sir WILLIAM GULL moved, "That, considering the importance of the services rendered by the Lord Mayor in inaugurating Hospital Sunday in the metropolis, and his zeal in promoting its success, it is necessary that Sir Sydney Waterlow should retain a permanent connexion with the Metropolitan Hospital Sunday Fund. He is, therefore, hereby appointed Chairman of the Council." Sir William thought it a singular advantage to this particular movement that Sir Sydney Waterlow should have been Lord Mayor in this present year, and it was desirable he should be placed in a permanent position in reference to it. The Hospital Sunday was, no doubt, a very great public movement, and, taken altogether, had a great interest, as it bore on the whole question of humanity; for, whatever might be their views on particular points of doctrine, all were agreed that they were members of one common family, and were bound to protect the weak, the aged, the ignorant, and the sick. There was, perhaps, no class of men who had more reason to hail the increasing interest in the sick poor than the members of his own profession.

The motion was seconded by Canon NISBET.

Mr. E. H. CURRIE referred in complimentary terms to the accessibility of the Lord Mayor, day by day, and hour by hour, to all who took an interest in the movement, and said that unless they had enjoyed that free access, it would have been next to impossible for the Council to have achieved success.

The motion was then put and agreed to unanimously.

The LORD MAYOR said he was very much gratified that they had thought it desirable that he should continue to be connected with the movement after he should have resigned his office of Chief Magistrate of this city. The great interest he had taken in it from the first made him feel the compliment all the more. He was sure it was a movement in the right direction. If one consideration had stimulated him more than another, it was that all good Christian people, to whatever religious denomination they belonged, might henceforward, on one Sunday in each year, unite in a common object of mercy and humanity, and which he hoped as long as the world lasted would ever be considered a duty. He looked forward with confidence to the success of the movement, not simply as a means of securing mere material advantages to hospitals, but of bringing hospital authorities together with the view to discuss and eventually eliminate the best principles of management. He should be glad to retain his connexion with the movement; but he felt most strongly that, with a view to its permanent success, the Lord Mayor for the time being should be the President.

The Rev. Dr. ALLON moved—"That the Lord Mayor be requested to receive contributions from those who were unable to attend a place of worship on Hospital Sunday, and others desirous of aiding the Hospital Sunday Fund, at the Mansion House, up to and including the 30th of June." Most of the original difficulties, said Dr. Allon, had been now overcome, and it was gratifying to think of the comparative consentaneousness with which the movement had been set on foot. He thought its reflex influence on the philanthropy of the country, and, he might say, of Europe, would be considerable.

The motion was seconded by Mr. CHARLES REED, M.P.

The motion, in which Sir ANTHONY ROTHSCHILD also expressed his hearty concurrence, was unanimously adopted.

The LORD MAYOR read a letter from Dean Stanley, stating that a collection would be made in Westminster Abbey on Hospital Sunday at each of the three services of the day.

At the instance of Bishop CLAUGHTON, seconded by the Rev. Dr. KENNEDY, it was resolved that a form of petition be drawn up, and signed by the Lord Mayor on behalf of the Council, for presentation to the City Companies, praying them to aid the fund.

Mr. R. B. MARTIN, Hon. Sec., availed himself of the opportunity to thank the newspaper press, and especially THE LANCET, for the impulse it had given the movement.

Dr. GLOVER referred to the success which had resulted to the Hospital Sunday enterprise in the large provincial towns where it had already been tried, from the Saturday contributions in workshops by working men, and he held that success up as an example.

At the instance of Bishop CLAUGHTON, a cordial expression of thanks was voted to the Lord Mayor for presiding on the occasion, and the meeting separated.

THE DRUITT TESTIMONIAL FUND.

A MEETING of the General Committee of the Druitt Testimonial Fund was held at the house of Mr. Haynes Walton on Saturday last, Sir W. Fergusson in the chair. The report of the sub-committee was received. In this it appeared that 107 of the chief members of the profession had requested to act as members of the general committee. The sub-committee had requested Mr. Haynes Walton and Mr. Norton, the treasurer and secretary, to purchase a silver cup and have it engraved with a suitable inscription, along with the names of the 107 members of the general committee.

Inscription on the cup:—"To Robert Druitt, M.R.C.P., F.R.C.S. This cup, together with a sum of £1215, was presented by 370 professional and other friends, in evidence of their sympathy with him in a prolonged illness, induced by years of generous and unwearied labour in the cause of humanity, and as a proof of their appreciation of the services rendered by him as author and sanitary reformer to both the public and the profession."

The Treasurer's report was as follows:—

Total receipts		£1284 13 11
Expenses of printing, lithographing, paper, postage, &c.	£23 16 11	
Purchase of silver cup engraved with inscription and names of 107 members of the General Committee	45 17 0	
Balance to be handed over to Dr. Druitt	1215 0 0	
		£1284 13 11

Dr. Druitt being still in India, a question arose as to the transfer of the money. It was proposed by Dr. Harley,

seconded by Mr. Adams, and carried, that Mr. Walton as treasurer, and Sir William Fergusson as chairman, should draw a check for £1215 0s. 0d., payable to Dr. Druitt's account in Messrs. Drummond's bank, and should take the banker's receipt for the amount. It was then agreed that a report of the meeting should be forwarded to every subscriber to the fund, embodying the following extract of a letter from Dr. Druitt to the treasurer.

"Madras, 26th April, 1873.

"Since leaving England I have received accounts of the very flattering testimonial which a large circle of friends propose to present to me. I must trust to you in my absence to convey to them all my grateful sense of their kindness, and my satisfaction at being thought in any way worthy of it. (Signed) "R. DRUITT."

Very congratulatory remarks were made upon the extremely small expenditure compared with the work which had been accomplished. A vote of thanks was passed to Mr. Haynes Walton the treasurer, and Mr. A. T. Norton the secretary. The meeting terminated with a vote of thanks to Sir William Fergusson the chairman.

Correspondence.

"Audi alteram partem."

AN EXPLANATION OF THE ALLEGED SCANDALOUS AND LIBELLOUS DOCUMENT RELATIVE TO DR. FORBES WINSLOW.

To the Editor of THE LANCET.

SIR,—After some hesitation I have come to the conclusion that I cannot allow the scandalous and libellous printed documents which have recently been circulated, with the evident intention of injuring and annoying me, to pass wholly unnoticed. The subject is, however, so peculiar and delicate that I find much difficulty in making the matter intelligible, without going into further details of a strictly private character, and this I certainly shall not, at present, be induced to do.

I must consequently content myself with saying that the husband of the lady whose name is most unjustifiably made use of in the document is, and always has been, a perfect stranger to me. I have never even seen him, nor have I ever written to or received any letter from him.

Nearly twelve years ago I was requested to see professionally the lady who had then recently left her husband's house and was residing with her mother. She was suffering from an attack of acute melancholia. She remained under my care for about a year and a half, when she recovered. During the lengthened time she was under my treatment, and for many years after I had ceased to attend her, my mouth was hermetically sealed, except to her own mother, as to the nature of her illness, as well as to the sad domestic circumstances which surrounded the case.

After the lapse of six or seven years I was spoken to by the mother of the lady relative to some proceedings which I was informed were contemplated in the Divorce Court, but I did not see the lady to whom I have before referred on that subject. My communications were solely with her mother and her solicitor. I had nothing to do with these proposed proceedings (which did not originate with me) beyond explaining the evidence I could give if called as a witness.

I heard nothing further on the subject until some years afterwards I was unfortunately asked to meet, at the house of a medical friend, a widow lady, the sister of the husband to whom I have referred. In the drawing-room of the physician at whose house I had been dining, this lady, in the presence of a number of strangers, addressed me in a most vulgar and offensive manner in reference to the cause of her brother and his wife not living together, and by her remarks and manner appeared to imply that I had interfered in the matter, and was the cause of the separation. This I indignantly denied, but the lady, not being satisfied with my emphatic repudiation of the charge, repeated with warmth her insinuations, and asked me why he wife did not return to her husband. Feeling intensely irritated at being so unjustly attacked in a private room, I said, "If you want to know the reason, don't ask me, ask the wife herself," and I then (what I immediately afterwards regretted) alluded to the nature of the case which the mother of the wife told me was proposed to be set up in the Divorce Court.

I heard nothing more of the matter for nearly a year. I then received an application from a solicitor on behalf of the husband, asking me to apologise for observations I was said to have made in reference to himself. I replied that the charge was false, and that I had nothing to apologise for. I subsequently referred him to my solicitor, and an action for alleged slander was commenced against me.

In that action my solicitor obtained an order upon summons for particulars of the persons to whom it was alleged that I had defamed the plaintiff. Particulars were delivered with the names of two well-known members of the medical profession, who, upon being applied to by myself as well as by the plaintiff's solicitor, denied that I had ever made the slightest reference to the subject to them, thus showing that their names had been very unwarrantably introduced into the case.

The plaintiff in the action, instead of taking the matter before a jury, in which case he would have had to prove his complaints by evidence, thought it right to have the validity of the pleadings first discussed before the judges *in banco*. Upon that discussion judgment was given in my favour upon two of the three counts of the plaintiff's declaration; and, as respects the third count, the judges held that, *if established by evidence*, the plaintiff would be entitled to recover damages.

A few days after this decision, and without any further communication with me or my solicitors, the plaintiff voluntarily and formally discontinued his action, and submitted to pay the costs of it, which costs were subsequently taxed, and the action thus ended. This was in May, 1872. I heard nothing further of the matter until the month of May, 1873, when the scandalous documents to which I have referred were, in disregard of all propriety and decency, circulated not only amongst the medical profession, but to others.

I do not desire to dwell upon this extraordinary proceeding, nor do I, for the reason to which I have referred, think it right to be drawn into further details upon such a delicate and painful subject. I content myself with the undoubted fact that I was fully prepared to defend the action referred to, but was precluded from doing so before a jury by the voluntary discontinuance of the suit on the part of the plaintiff without my consent being asked or obtained.

I am, Sir, your obedient servant,

Cavendish-square, June 11th, 1873. FORBES WINSLOW, M.D.

SKIM-MILK TREATMENT IN DIABETES.

To the Editor of THE LANCET.

SIR,—The communication of Dr. Barclay, contained in your issue of the 24th ult., confirms the remarks I made at the Clinical Society on the previous evening during the discussion that took place on Dr. Greenhow's paper. I then referred to one of my hospital cases in which I had lately ordered the skimmed milk to be given, and with the following result. The particulars are to be found in full in report the of my clinical clerk, Mr. Paley. I need only mention here the main facts bearing on the point in question.

The patient, T. D——, aged thirty-nine, had been sent to me from Hampshire by a medical practitioner, and was admitted to Stephen ward on Dec. 7th, 1872. He belonged to a healthy family, and had enjoyed good health until about a year previously, when he became the subject of diabetes. It was an uncomplicated case of the disease, and at one time, according to the account given, as much as twenty-four pints of urine were passed in the twenty-four hours. He was placed upon the ordinary restricted diet, with bran biscuits as a substitute for bread; and on Dec. 13th and 14th the state of the urine was as follows:—

	Quantity of urine per 24 hours.		Sp. gr.	Quantity of sugar per fluid oz.	Quantity of sugar per 24 hours.
	Pints	oz.		Grains.	Grains.
Dec. 13th	6	10	1038	24	3120
„ 14th	4	16	1035	22·50	2160

The restricted diet was continued, and the patient was further placed under a plan of medical treatment which I purposely refrain from mentioning here, as it has no concern with the subject of this communication. The urine underwent a gradual improvement, and between the 7th and the 23rd of January its condition was found to be as follows:—

	Quantity of urine per 24 hours. Pints oz.	Sp. gr.	Quantity of sugar per fluid oz. Grains.	Quantity of sugar per 24 hours. Grains.
Jan. 7th	1 18	1029	2·40	91
„ 8th	2 18	1022	Trace of sugar.	
„ 9th	2 8	1030	„	„
„ 10th	4 0	1020	2·40	192
„ 11th	2 6	1028	Slight sugar.	
„ 12th	2 7	1030	No sugar.	
„ 13th	3 6	1027	„	
„ 14th	2 14	1024	„	
„ 15th	2 8	1023	„	
„ 16th	3 6	1022	„	
„ 17th	2 6	1024	„	
„ 22nd	2 4	1025	„	
„ 23rd	2 6	1029	„	

The urine was collected from six o'clock one morning till the same time the next, so that the specimen under date of the 23rd was for the day and night of the 22nd. On the morning of the 23rd the medical treatment was discontinued and the diet changed to seven pints of skimmed milk per diem. At the patient's request the quantity was increased on the following day to eight pints, and afterwards continued at this. The following shows the effect produced:—

	Quantity of urine per 24 hours. Pints oz.	Sp. gr.	Quantity of sugar per fluid oz. Grains.	Quantity of sugar per 24 hours. Grains.
Jan. 24th	5 0	1014	No sugar.	
„ 25th	5 0	1017	4·80	480
„ 26th	5 16	1033	13 32	1545
„ 27th	5 6	1027	24·	2544
„ 28th	6 0	1037	17·13	2055

On the 28th the skim-milk treatment was discontinued. I had intended to have persevered with it longer, but the patient simply refused to comply. I am alive to the non-compliance of diabetic patients that sometimes happens in carrying out their dietetic instructions, but I have reason to believe that in this case my orders were implicitly obeyed. During the five days the patient was under the treatment he lost four pounds in weight. Three weeks after admission his weight was 10 st. 5 lb. By the time of commencing the skim-milk it had increased to 10 st. 13 lb., and on leaving it off it was 10 st. 9 lb. The report says that during the last two days of the treatment the patient complained greatly of thirst, although he was taking eight pints of skim-milk per diem. It may be mentioned that the milk supplied to the hospital is daily examined, and is required to come up to a standard of good quality.

The patient was kept in the hospital till March 12th. At first, after discontinuing the skim-milk, he was placed on the restricted diet, and subsequently the former medical treatment was resumed. The weight on Feb. 15th had risen to 11 st. 3 lb., and at the date of his discharge it was 11 st. 7 lb. The urine again fell in quantity to from two and a half to three pints per diem, and the sugar to an average of about 600 grains. It never returned to the satisfactory condition that existed before the skim-milk was commenced, and I am under the conviction that the skim-milk exerted a direct pernicious effect upon my patient.

I am, Sir, yours obediently,

Grosvenor-street, June 2nd, 1873. F. W. PAVY.

To the Editor of THE LANCET.

SIR,—As a discussion is now going on in THE LANCET on the skim-milk treatment of diabetes, I desire to record briefly the following case now under my care:—In a girl, twenty-one years of age, suffering from the disease in a severe form, of long standing, and extremely emaciated, I have succeeded, by means of the skim-milk treatment, in reducing the daily quantity of urine from 9 and 10 pints, to 4 and 4½ pints, and the specific gravity from 1050 to 1020. The patient now rests at night, and has no thirst; she used to drink until waterlogged, her stomach being distended visibly. She has never been thoroughly on the skim-milk. I found she would eat crusts of bread, and could not prevent it. I therefore recommended gluten bread, of which she takes two or three pieces in the day. For two days she was without this bread, and had nothing but skim-milk for nearly three days, when the specific gravity of the urine fell as low as 1015. I find the specific gravity is always greatest in the morning, sometimes as high as 1025; and in the evening it varies from 1015 to 1020, and still contains a considerable quantity of sugar. However, the health of the patient is very greatly improved, and she now enjoys a comfort to which she had long been a stranger. The case appears to be too far advanced to permit of the complete arrest of the disease; nevertheless, it is a striking illustration of the great degree of relief obtainable by the treatment in the worst form of the disease.

I am, Sir, your obedient servant,

Villiers-street, Sunderland, June 2nd, 1873. JAMES WILSON.

MEDICAL BENEFIT CLUBS.

To the Editor of THE LANCET.

SIR,—I have received numerous letters from medical men both in town and country with reference to the above subject, and all seem to agree that such a scheme, if well organised and managed, would be a great boon to the profession, and also be likely to succeed in a pecuniary point of view. They differ, however, very materially in their suggestions as to the best mode of carrying out the undertaking. After careful consideration, I conclude that we have two plans before us. The first, and most simple, is to induce some good Assurance Office now existing to commence this branch of business, and I have no doubt this could easily be done by a little combined influence. The second is to form a central committee for the purpose of establishing a new Medical Provident Society, scale of payments to be calculated by a competent actuary, and a small subscription commenced for preliminary expenses. Before doing this, however, it is necessary to discover how far the profession would be inclined to support such a society; and it has been suggested to me that those medical men wishing to join in the formation of this benefit club should communicate with me so that we might have some idea of the probable number of members in the first instance.

I am, Sir, yours, &c.,

WM. AKERMAN, L.K.Q.C.P., M.R.C.S., &c.

20, Golborne-road, W., June, 1873.

IRELAND.

(From our own Correspondent.)

NOTHING of importance has occurred in the Irish medical world during the last few weeks until last Monday, when the several medical societies held their annual meetings, as is usual on the occasion of the election of the Council for the Royal College of Surgeons. Four members of the Council lost their seats this year, amongst whom was Mr. Hargrave, the representative of the College in the General Medical Council. The thirtieth annual report of the Council shows that 4 candidates were admitted to the Fellowship during the year, and 125 gentlemen received letters testimonial, 15 candidates being rejected for the final examination. The entire number on the lists of the College now amounts to 371 fellows and 2424 licentiates. The income for the year was somewhat over £4000, the expenditure somewhat under £4000, leaving a balance of £350. The President and Council, in their report, express an earnest desire that the scheme for a conjoint examination agreed upon by the University of Dublin, the King and Queen's College of Physicians, and the Royal College of Surgeons in Ireland, should receive, at their earliest convenience, the sanction of the General Medical Council. During the year examinations upon the dissected subject had been decided upon. A Professorship of Aural and Ophthalmic Surgery had been decided upon, and Dr. Henry

Wilson appointed to that office. The Professor of Medicine, Dr. Benson, and the Professor of Surgery, Mr. Hargrave, both resigned their professorships, and Dr. Little and Mr. William Stokes were respectively elected to those chairs. The attention of the Council was also directed to the consideration of the late Army Medical Warrant.

The meeting of the Royal Medical Benevolent Association of Ireland was very successful. The funded capital has now reached £15,000, and the amount allotted for distribution this year was within a few pounds of £1000. A novel feature, and one that was dwelt upon with considerable gratification by the various speakers to the resolutions, was the formation of junior branches of the Association amongst the medical students of the Queen's University, Belfast, and the Steevens' Hospital College, Dublin, from each of which branches really handsome contributions were forwarded. The thanks of the Association was also given to the Indian branch of the Association, which contributed largely to its funds; and Dr. King, of the Madras Presidency, made an effective speech in reply. Sir Dominic Corrigan pointed out the inestimable value of the Association to our necessitous professional brethren, their widows, and orphans, and the fact that there were eighty-six applicants for relief this year, and that close upon £1000 was distributed amongst them. He also alluded to the proposal made by "Nemo," who offered £1000 to the Association provided that the profession in Dublin subscribed £2000 amongst them, and remarked that he disliked spasmodic benevolence; what they required was a quiet, ever-increasing stream that fertilised, and not a torrent that tore away. As yet but a fourth of the sum had been subscribed, and consequently "Nemo" had not contributed. When the good Samaritan found a man sick and wounded, however, he did not say, "I will give so much if you give so much." And he was under the impression that if he had a short conversation with "Nemo" a slight effort would induce him to follow that good example, and that next year "Nemo" would appear in their report as the good Samaritan of the Medical Benevolent Association.

The Irish Medical Association also held its meeting on Monday last. It is a pity that this society is never heard of except on the first Monday of June in each year. However, it makes up for its shortcomings by taking credit to itself for all the work done by the various other associations. Nothing new of much importance appeared in the report of this Association. The principal resolutions affected the status of the Poor-law medical officers, and have been already alluded to in connexion with the association belonging to that body. A resolution was carried as to the importance of making some provision for the widows and orphans of medical men connected with the Poor Law by a compulsory deduction from their salaries. This, though well intentioned, does not find favour with that service, which is aware that so long as superannuation is merely permissive, boards of guardians will take advantage of the existence of any fund to refuse superannuation. The plea of prudent and economical habits, reputed wealth, life insurance, &c., has frequently prevented superannuation under the present *régime*. The sanitary condition of the country was also alluded to as well as the Army Medical Warrant. The meeting, on the whole, was as successful as it usually is, it being very difficult to collect medical men together, owing to their varied and onerous duties.

The Irish Poor-law Medical Officers' Association did not hold its annual meeting this year, as it has been considered more advisable to wait until the introduction of the Irish Health Bill, which has now got as far as the Treasury. The secretary, Dr. Maunsell, however, has issued to the Poor-law medical officers of Ireland an analysis of the population, acreage, and expenditure under sanitary and medical Acts throughout the country, which will facilitate matters greatly when the measure is introduced. The population under each medical officer numbers 8000, the area fifty square miles, the salary £100; the total poundage on Poor-law valuation is 1*s.* 3¾*d.* in the pound, the medical salaries ¾*d.* in the pound, the sum spent on sanitation is represented by one-eighth of a farthing in the pound. The population is sparse when compared with the acreage, being but one to the four acres; but then, owing to the vast quantity of mountain and bog, and various conditions in connexion with the tenure of land, the people are huddled together in numerous small villages. The domestication also of the fowl and the pig, and not unfrequently the cow and the donkey, in the family apartment, together with the total absence of all hygienic requirements, causes a great want of some sanitary measure for Ireland. Dr. Maunsell, in his analysis, also alludes to the distribution of the dispensary districts, which, instead of being as nearly as possible seven miles square, are frequently twenty-five miles long by two broad, which greatly interferes with the perfection of medical attendance on the sick poor, as well as registration and vaccination. With the exception of the meetings of the various medical associations, nothing of importance has occurred in the medical world in Ireland lately.

Dublin, June 4th, 1873.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on June 5th:—

Davis, Harry, Collington, Cornwall.
Pain, Tertius D'Oyley, Middlesborough, Yorkshire.
West, Rowland Hill, Chippenham, Wilts.

The following gentleman also on the same day passed his Primary Professional Examination:—

Potter, Henry Percy, St. Thomas's Hospital.

CHOLERA has now entirely disappeared from the Danube.

TWO bakers were fined at Marylebone last week for using alum in making bread.

THE Agricultural Children Bill was read a second time in the House of Lords on Tuesday night.

AT Allahabad the 19th Regiment of Foot is suffering from small-pox.

H.R.H. the Princess of Wales has presented a donation of £25 to the ball committee for the funds of the University College Hospital.

OF thirty-eight samples of coffee lately purchased in Wandsworth, Streatham, Battersea, and Putney, and analysed, twenty-one were adulterated with chicory.

YELLOW FEVER, it is stated, is disappearing from Monte Video, and the port of Buenos Ayres will soon be reopened.

THE late John Thomas Murphy, Esq., has bequeathed the sum of £105 towards the funds of Mercer's Hospital, Dublin.

VENTNOR HOSPITAL BALL.—A grand ball, under the patronage of their Royal Highnesses the Princess Christian, the Duchess of Teck, and a very large number of the nobility, will be held at Willis's Rooms, St. James's, on Tuesday, June 17th, in aid of the funds of the Ventnor Hospital on the cottage principle.

SANITARY AND EDUCATIONAL EXHIBITION.—In connexion with the Social Science Congress, to be held at Norwich, from the 1st to the 8th of October next, there will be an exhibition of educational, sanitary, and domestic appliances, based on the experiment which proved so successful at Leeds in 1871. The object of the exhibition is to bring under the notice of the public generally, and particularly those who are interested in social, sanitary, and educational questions, the latest scientific appliances for improving the public health and promoting education.

ROYAL COLLEGE OF SURGEONS OF IRELAND.—On the 2nd inst. the following office-bearers were elected for the ensuing year:—President: Dr. Denham. Vice-President: Mr. Robert W. Smith. Secretary: William Colles. Council: Robert Adams, William Colles, Richard G. H. Butcher, Rawdon Macnamara, George H. Porter, Benjamin MacDowel, Edward Ledwich, Alexander Carte, James H. Wharton, Albert J. Walsh, John Morgan, Edward Hamilton, George H. Kidd, Robert McDonnell, Edward D. Mapother, A. Jacob, Frederick Kirkpatrick, Alfred H. McClintock, and Henry Croly; the last five gentlemen being new members.

Medical Appointments.

AICKIN, T. H., L.A.H.Dub., L.M., has been appointed Apothecary and Accoucheur to the Fever Hospital and House of Recovery, Cork-street, Dublin, vice Lloyd, resigned.

ANDREW, J., M.D., F.R.C.P.Ed., has been appointed one of the Extra Physicians to the Royal Hospital for Sick Children, Edinburgh, vice Brakenridge.

BOND, T., M.B., F.R.C.S.E., has been appointed an Assistant-Surgeon to the Westminster Hospital, vice Cowell, appointed a Surgeon.

BRAKENRIDGE, D. J., M.D., F.R.C.P.Ed., has been appointed one of the Ordinary Physicians to the Royal Hospital for Sick Children, Edinburgh, vice Gamgee, appointed Brackenbury Professor of Physiology in Owens College, Manchester.

DAVY, R., F.R.C.S., has been appointed Lecturer on Anatomy at the Westminster Hospital Medical School, vice G. Legge Pearse, F.R.C.S.

GODFRAY, A., M.R.C.S.E., has been appointed Ophthalmic House-Surgeon to the Royal Westminster Ophthalmic Hospital.

HALL, J. T., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Alton District of the Cheadle Union, vice Robinson, deceased.

HAMILTON, F. G., M.R.C.S.E., has been appointed House-Surgeon and Assistant-Secretary to the We-t Herts Infirmary, Hemel Hempstead, *pro tem.*, vice Case, appointed Assistant Medical Officer to the Metropolitan Asylum District Asylum for Imbeciles, Leavesden.

HARDESTY, J. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Burgh of Galashiels, Selkirkshire.

JOHNSTON, R. G., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Maguiresbridge Dispensary District of the Lisnaskea Union, Co. Fermanagh, vice Holtan, deceased.

LLOYD, E. J., M.B., C.M., has been appointed Assistant Medical Officer to the Joint Counties Asylum, Carmarthen.

LLOYD, T. C., M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the West or No. 3 District of the Llandilofawr Union, vice Williams, deceased.

M'BAIRE, C., M.B., C.M., has been appointed Junior Assistant Medical Officer to the Lancashire Lunatic Asylum, Lancaster.

MATURIN, H. L. S., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Churchill Dispensary District of the Letterkenny Union, vice W. H. Maturin, L.K.Q.C.P.I., L.R.C.S.I., deceased.

RENTON, J. C., M.B., L.R.C.P.Ed., has been appointed Assistant to the Extra Physicians, Royal Hospital for Sick Children, Edinburgh, vice Maclaren, whose appointment has expired.

STANIGAR, Mr. F. L., has been appointed Assistant-Surgeon to the Glasgow Lock Hospital.

STEVENS, G., F.F.P. & S. Glas., has been appointed Medical Officer to the Pride of the Valley Lodge of the Ancient Order of Shepherds and the West Suffolk Friendly Societies, Bury St. Edmund's, vice Matthews, deceased.

TERRY, W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Kirkby and Selston or No. 2 District of the Basford Union, vice Matthews, resigned.

WATKESON, J., M.R.C.S.E., has been appointed Medical Officer, *pro tem.*, to the Borough Gaol, Birmingham, vice Hill, resigned.

Births, Marriages, and Deaths.

BIRTHS.

GAITSKELL.—On the 8th inst., at Clarendon Villa, Western-road, Ealing, the wife of E. F. Gaitskell, L.R.C.P.L., of a son.

GLANVILLE.—On the 25th ult., at Spring-grove, Isleworth, the wife of U. G. Doyle Glanville, L.R.C.P.Ed., of a son.

HARE.—On the 3rd inst., at Brook-street, Grosvenor-square, the wife of C. J. Hare, M.D., of a daughter.

KEALY.—On the 7th inst., at Ashley House, Gosport, the wife of J. R. Kealy, M.D., of a son.

MARSHALL.—On the 3rd inst., at Caledonia-place, Clifton, the wife of Henry Marshall, M.D., of a daughter.

NURSEY.—On the 5th inst., at Nicholson-street, Sunderland, the wife of Chas. Fairfax Nursey, L.R.C.P.Ed., of a daughter.

SNELL.—On the 5th inst., at Barrowden, near Stamford, the wife of Ebenezer Snell, M.R.C.S.E., of a daughter.

MARRIAGES.

DOUGLAS—NEWTON.—On the 4th inst., at the Parish Church of Lanchester, George Douglas, M.D., to Susanna Ruth, eldest daughter of Joseph Newton, Esq., both of Gateshead.—No Cards.

LAWSON—JACKSON.—On the 3rd inst., at the Congregational Chapel, Baker-street, Enfield, Thomas Cornelius Lawson, M.R.C.S.E., to Mary Ann, daughter of Samuel Jackson, Esq.

WHITWELL—SMITH.—On the 8th ult., at Byculla, Bombay, Assistant-Surgeon Henry Whitwell, Bengal Medical Service, to Elizabeth Wishart, daughter of the late James Smith, Esq., of Edinburgh.

WILSON—GREAVES.—On the 3rd inst., at Haverstham, Stevenson M. W. Wilson, M.R.C.S.E., to Mary, daughter of R. Greaves, Esq.

DEATHS.

BERWICK.—On the 30th ult., Dr. G. J. Berwick, of St. Helen's House, Isle of Wight, late of the Indian Army, aged 70.

COCHRANE.—On the 26th of Jan., at his Castello Tijuca, Rio de Janeiro, Dr. Thomas Cochrane, aged 64.

DAVIES.—On the 31st ult., at Newport, Monmouthshire, Joseph Davies, M.R.C.S.E., of Bedwas, Glamorganshire.

MOORHEAD.—On the 2nd inst., at Annaghmakerg, Co. Monaghan, Dr. John Moorhead, aged 87.

NICHOLSON.—On the 3rd inst., J. Nicholson, M.R.C.S.E., of Gloucester-street, Sheffield, aged 75.

PORTER.—On the 22nd ult., Charles Porter, M.R.C.S.E., of Digbeth, Birmingham.

RISK.—On the 28th ult., Keats Robinson Risk, M.D., of Blackpool, aged 57.

ROUCH.—On the 7th of April, at Rockhampton, Queensland, Australia, J. B. Rouch, F.R.C.S.E., aged 35.

TODD.—On the 3rd inst., A. Todd, M.R., late of Grosvenor-street, Grosvenor-square, aged 66.

VICKERS.—In April, at Perth, Western Australia, of phthisis, Wm. Vickers, M.R.C.S., Government Medical Officer, aged 30.

MEDICAL RELIEF AT MANCHESTER.

REPORT OF THE SUB-COMMITTEE OF THE MANCHESTER MEDICO-ETHICAL ASSOCIATION ON PROVIDENT DISPENSARIES.

(*Adopted by the Committee, April 28th, 1873.*)

THE Committee is of opinion—

1. That a large number of persons receive medical treatment at charitable institutions, who, though perhaps unable to pay for advice in the usual manner, are perfectly able to pay were increased facilities afforded them for doing so.

2. That the system of Provident Dispensaries, or (as they may be better styled) Provident Sick Societies, appears calculated to afford an easy method of payment for medical services on the part of such persons, and, at the same time, be sufficiently remunerative to the medical attendant.

3. That it is important that the following three principles be adhered to in connexion with such Societies:—

(*a*) That they should be entirely self-supporting.

(*b*) That every qualified medical man should have the option of attaching himself to some one Society.

(*c*) That no medical officer should delegate his duties to an unqualified assistant.

4. That as regards Manchester and Salford, the plan of such Societies should be as follows:—

(*a*) That numerous Societies should be formed throughout the town and immediate suburbs, in those districts in which the labouring classes reside, with the view of having the head quarters of each Society in proximity to the homes of its members.

(*b*) That a small building, as unpretentious as possible, should form the centre of each Society, where the business of the latter may be conducted.

(*c*) That individuals or families whose earnings do not exceed £100 per annum should be considered eligible for membership.

(*d*) That the contribution for each member should be 1*d.* per week. That 6*d.* per week should suffice for the membership of a man, his wife, and children under fourteen years of age; or 3*d.* per week if the earnings of the whole family do not exceed £52 per annum.

(*e*) That any person joining during illness should pay 5*s.* entry money.

(*f*) That any member should be attended in her confinement by a medical officer on payment of 10*s.* 6*d.* in advance, if the earnings of the family be under £52 per annum, or of 15*s.* if they be above that sum.

(*g*) That each individual Society should manage its own affairs by a committee appointed at its annual meeting, consisting of the medical officers and a like number of members. That all bye-laws must be in accordance with the standing rules.

(*h*) That all the separate Societies should be affiliated to each other by a central committee composed of two medical officers and two members appointed by the committee of each Society.

(*i*) That the duties of such central committee should be as follows:—To frame rules for the management of the Societies. To promote the establishment of new Societies where needful. To advise with the committees of such as may be in difficulties. To adjudicate in all matters of dispute referred to it by the individual Societies. To be the representative and mouthpiece of the Societies in their relations with the public.

(*j*) That should a majority of the medical officers attached to any Society consider the conduct of any medical officer of such Society to be unprofessional, they may communicate such opinion to the central committee, who may then by a majority sever his connexion with the Society.

5. The sub-committee further recommends that a general meeting of the profession in the town be held to consider this report, and that in the event of its general tenor being adopted by such meeting, a joint committee of this Society and the general profession be formed to co-operate if possible with other bodies, at present considering other phases of the question of medical attendance on the working classes, with a view to carrying out this scheme.

C. H. BRADDON,
W. H. HARLOW, M.D., } Hon. Secs.

Notes, Short Comments, and Answers to Correspondents.

Fenator, (Exmoor.)—The theory most prevalent on the Scotch moors as to the cause of the grouse disease is, for this year at any rate, that the birds fed too much on the badly-ripened grain during the later months of 1872, and that, in consequence of the rainy season, the seeds of the heather—the natural food of the birds—were never properly matured so as to feed them during winter.

Cornelia, (Wisbeach.)—M. Rodin's charming little work is entitled "Les Plantes Médicinales et Usuelles de nos Champs, Jardins, et Forêts." Its contents (beautifully illustrated) are of much value to the mothers of families. It is published by Rothschild, of Paris, for a few francs.

Mrs. Grace Johnson.—We would advise our correspondent to submit them to the India Office.

THE communication of *Dr. R. P. Maclaren* is acknowledged with thanks.

COLD DOUCHES IN SPLENIC ENLARGEMENT.

Dr. Edward Haughton, of Guernsey, writes to us that it is no doubt gratifying to observe that Professor Mosler is beginning to use cold douches locally in cases of enlargement of the spleen, as mentioned in THE LANCET of May 31st and the *Practitioner* of April, 1873; but he alleges that the real author of the practice had been kept out of sight. Professor Mosler can hardly be ignorant, he thinks, of the practice of Dr. Louis Fleury, late of Bellevue-chez-Meudon, France, who has devoted much attention to this subject. In confirmation he gives an extract from his writings in 1856, in which cases of reduction of volume both of the spleen and liver by the use of the cold douche are carefully recorded. The extract is a lengthy one in French, and it sets forth in detail that a gardener, aged thirty-five, was attacked with quotidian intermittent fever in August, 1846, and that he suffered from constant recurrences of the fever during the autumn of that year and the winter of 1847, for which he took quinine. He was under treatment in hospital in March and June of that year, and on the 23rd of June he consulted Dr. Louis Fleury. He was ordered cold douches to the region of the spleen, and two of these were given at 8 A.M. and 5 P.M. on the 24th and subsequent days, with the effect of reducing in a remarkable degree the enlargement of the spleen, as determined by the results of percussion. On the 30th he was reported as in better health than he had been for eighteen months, and by the 20th July he had regained his health and weight. It is worthy of note that Dr. Fleury, although the real author of that special use of the douche by which the volume of the liver and spleen can be so remarkably diminished, does not fail to acknowledge how much we owe to Currie for the primary idea of treating ague by cold previous to the first onset of the hot stage—viz.: "Quelquefois, dit Currie, les accès ont été prévenus par des affusions pratiquées environ une heure avant l'époque presumé de leur retour, et la maladie a été complétement guérie après quatre ou cinq affusions de ce genre." Dr. Haughton adds, with respect to the use of cold at the commencement of the hot stage of ague, that he has used it with the very best results, and can confidently recommend it to the profession as safe and efficient.

The Director-General of the Medical Department of the Navy is thanked for the paper, which shall be published in an early number of THE LANCET.

VENTILATION OF SHIPS.

To the Editor of THE LANCET.

SIR,—In your journal of Feb. 22nd last there is a letter from Dr. Rattray, of H.M.S. *Britannia*, about the ventilation of ships, in which he refers to the 33 volumes of carbonic acid which he found in 1000 volumes of the cock-pit air of H.M.S. *Bristol*. This enormous amount of carbonic acid in the air was first mentioned in a paper read before the Medico-Chirurgical Society, and reported in THE LANCET of Jan. 25th last. Dr. Althaus at the time drew attention to the unheard-of amount of carbonic acid.

Now, Sir, for some time past I have been pursuing numerous experiments upon ship air in a wooden frigate—viz., the *Doris*, very much crowded, having nearly 600 people on board. My results are very different from those arrived at by Dr. Rattray. I have examined the air in the cells, cock-pit, store-rooms, lower deck, main deck, upper deck, sick-bay, and ward-room very often, and I have never found more than 3·21 volumes of carbonic acid in 1000 volumes of air. The amount present, in fact, of carbonic acid seldom rose above 2·24 volumes, even with a prisoner in the cell. I was not a little surprised to see such an amount as 33 volumes existing in the air of the cells on board the *Bristol*. I repeated my experiments over again, with the same results as before.

I hasten to forward these few remarks for publication, hoping that others may be induced to follow up this important subject; for where such very different results are arrived at, under apparently similar conditions, there would appear to be an element of error somewhere, and it is very important that this should be discovered, and the very best way of doing so is by further experiments. I am myself at present making a variety of experiments, in order to ascertain the amount and kind of impurity existing in ship air, and when they are sufficiently elaborated I shall be most willing to give them ample publicity. It will be seen that my figures as to the amount of carbonic acid found in vitiated ship air approach pretty closely to those given by Dr. Parkes in his work on Hygiene when speaking of the air of crowded school-rooms, &c. I consider the late Dr. Edmunds' system of ventilating ships excellent, and I may state here I have served for three years in an Indian troop-ship in the Red Sea in which this system of ventilation was in use. The automatic ship ventilator of Dr. Thiers seems to require some degree of motion; but there are times when a ship is almost still although moving through the water.

I am, Sir, your obedient servant,
L. H. J. HAYNE, M.D., Surgeon R.N.
H.M.S. *Doris*, Guadaloupe, West Indies, April 14th, 1873.

CALCULI IN THE LOWER ANIMALS.

AT a late meeting of the Philadelphia County Medical Society, a veterinary surgeon exhibited a number of interesting calculi taken from the alimentary tract of the lower animals, including one of "oat-hair," which had caused the death of a horse. When the horse's abdominal cavity was opened, the stomach and intestines appeared healthy; but on examination a calculus was found in the narrow part of the transverse colon. Thin oats with a quantity of hair at the extremity of the grain are said to give rise to the formation of "oat-hair" concretions.

THE PALL MALL GAZETTE AND OUT-PATIENT REFORM.

WE are compelled to defer the publication of an article on the above subject.

M.A. Oxon. (New University Club) would much oblige us by forwarding his name and address, as we have unfortunately mislaid his private note.

PROTECTION AGAINST FIRES.

THE recent destruction of the Alexandra Palace by fire has brought the various means of extinguishing that element into renewed prominence. Mr. Nicoll's Fireproof Starch, so efficacious in textile fabrics, has not yet been tried on any large scale on coarser inflammable material. The "Extincteur" has much to recommend it. Last Saturday, to test the invention with which the Abbey is now protected against fire, the Dean of Westminster had a highly inflammable pile, some six feet in diameter and four high, constructed of shavings, wooden battens, and tar. This made a very hot and unmanageable looking fire, which, however, when at its height, was effectually subdued in two minutes by the use of a No. 4 "Extincteur." This result appeared almost magical, the more so when we ascertained that only about two gallons of fluid had been used. "L'Extincteur," or "Dick's Chemical Fire Engine," is merely a powerful gazogene filled with water, and charged with carbonic acid gas by the admixture of tartaric acid and bicarbonate of soda. The pressure thus obtained, amounting to 60 lb. on the square inch, drives the contents from the discharge-pipe at the rate of about a gallon per minute, with force to throw it 25 feet. Thus carbonic acid is the active agent, supplying both the force to reach and the material to extinguish the fire, the water only serving to generate and carry the gas. Hence the adoption of L'Extincteur will curtail the loss which results from the use of water to extinguish fires. The invention will do much to render us independent of the conduct of those who have allowed (or caused) the Act of 1871, for a constant high pressure water-supply in London, to become a dead letter. The International Exhibition, the Albert Hall, and Westminster Abbey, as well as many mills and factories, are already protected by the invention. The Admiralty have ordered L'Extincteur to be supplied to all troop-ships. We hope to see it introduced into our hospitals; for the results of a fire that could not be immediately checked, occurring in a hospital, are too awful to contemplate. It is not long since the burning of a building adjoining Guy's afforded another example of the too often fatal delay in charging the hydrants, and to keep stagnant water about a hospital in fire apparatus can scarcely fail to be injurious. So L'Extincteur, which when charged continues in constant readiness to be taken on the back, and used by anyone immediately on discovering the outbreak of fire, promises to be the most trustworthy protection for hospitals. L'Extincteur No. 4 weighs 70 lb., and holds 5 gallons; Nos. 5 and 6 weigh 90 and 120 lb., and contain 7 and 10 gallons respectively.

DENTAL SURGERY IN THE PUBLIC SERVICES.

To the Editor of THE LANCET.

SIR,—In your impression of May 31st you called the attention of your readers to "the treatment, or rather want of treatment, of diseases of the teeth among our soldiers and sailors," and alluded to the fact that the subject has again been pressed upon the notice of the authorities. As to myself attaches the responsibility of having brought forward this question, but more especially as I was careful to acquaint myself with the subject in all its bearings before addressing the Admiralty and War Office in March, 1872, you will, I trust, grant me space to reply to one or two of your observations, as well as to offer a few supplementary remarks.

From your statement that the most skilful dentist can do no more than extract in most cases of acute toothache when the agony has become unbearable, and the nerve of the tooth is fully exposed, I must express my dissent, and I know that my assurance that it is extremely rare to remove a tooth under the circumstances described would be corroborated by other members of the profession, an exposed nerve being usually amenable to treatment.

You are quite correct in stating that the art of stopping teeth is not to be acquired in "six easy lessons"; but the question still arises whether such an amount of practical knowledge of it as would render the medical officers sufficiently expert to preserve where they now destroy is necessarily beyond their reach. At present, be the cause of suffering what it may, the remedy is the same—extraction; and although I believe that many years ago instruments for less radical treatment were issued to both services, with recommendations for their use, the incapability of the officers to avail themselves of them rendered the instructions nugatory. Such an administration of affairs will hardly be allowed to continue, especially when it is proved that there are no difficulties in the way of an improved system that could not be surmounted by the establishment of a Professorship of Dental Surgery at Netley, Greenwich, or elsewhere, so that the necessary instruction could be imparted to all officers entering the medical department of either service with great facility.

I am informed by those doing duty as surgeons in the Guards and Household troops, and I am sure with truth, that their duties already press too heavily to allow of their adding to them by the practice of dentistry, and it was with regard to this that I proposed the appointment, at all military centres and naval depôts, of dentists, whose sole occupation should be the inspection and treatment of the teeth of the men. Amongst none is the pressing want of some such supervision more distinctly obvious than the lads on board training ships and in military schools, who suffer greatly and permanently from the lack of attention in this particular that has hitherto prevailed. It is when absent on foreign stations (and it must be remembered that regiments are not ordered abroad for short periods) that the knowledge acquired would prove so especially valuable, not only to the men in charge, but to the medical officer himself, whose assistance would be thankfully claimed by the civil population, themselves at a distance from efficient professional attendance. I have every reason to hope that when this important subject is brought, as it will be, fully under the notice of the House of Commons, the faultiness of the present system will be readily acknowledged, and the necessary supplies granted at once for rendering the medical service as complete in all its branches as the public servants have a right to demand, and the expenditure of nearly half a million of money yearly entitles the country to expect.

I remain, Sir, yours faithfully,
WILLIAM DONALD NAPIER.
George-street, Hanover-square, June 4th, 1873.

ROME.

IF it is "never too late to mend," it is never too soon to begin, and the Eternal City, roused to activity by complaints of its unhealthiness, has taken steps to right itself in the eyes of the world. The Communal Council has decided that five "pharmacies" will remain open during the night, and that a physician and surgeon (double qualification) will be permanently retained at each of these pharmacies to meet, on the moment, the wants of all comers; while the Directors of Public Health have accorded a fee of five francs for each night of effective duty to the physicians attached to the said pharmacies. The Directors urge upon the profession in Rome to make not a minute's delay in applying for these posts, and in lodging at the same time their diplomas as duly qualified practitioners. Such is the announcement from the Capitol, and we hope the hot haste of candidates for its tempting offer will not degenerate into an "ugly rush," or, at least, that they will be able to stop themselves before taking a header off the Tarpeian Rock or into the Forum. Five francs for a whole night's active duty, summer and winter! Waiters in Rome get ten francs and their supper in the season for doling out refreshments at a dancing party. On the same night the pianist earns his fifteen or twenty francs for playing to the guests (supper also included). But, for the half of the smallest of these sums, the physician must sleep every day so as to be in readiness every night to wait upon the scores of cases that one of the unhealthiest of modern cities can supply. Verily *dat Galenus opes!*

Dr. A. S. Stoudenaker, (Baltimore.)—As regards the general population of England, the Annual Reports of the Registrar-General contain ample mortality statistics. The Annual Reports of Mr. Simon should also be consulted for their important medical and sanitary bearings upon the question of health. There are no sickness statistics kept in this country for the whole population; but our correspondent will find such statistics for particular classes of the community—e. g., in the Reports of the Army and Navy Medical Departments, of the Customs Commissioners, of the Postmaster-General, of the Metropolitan Police Commissioners; also in the Journals of the Statistical Society, in Mr. Nelson's "Contributions to Vital Statistics," and in the Reports issued by the Manchester and Salford Sanitary Association.

Æsculapius, (Deptford Bridge.)—We do not remember any work in which the subjects alluded to by our correspondent have been specially treated. Let him consult Carpenter's Physiology, Mivart's Elementary Anatomy (published by Macmillan), and Huxley's Comparative Anatomy.

A Constant Reader.—We never recommend a physician or surgeon.

THE LATE DR. W. TYLER SMITH.

To the Editor of THE LANCET.

SIR,—Allow me to correct a small error in the biographical sketch in your last issue of Dr. W. Tyler Smith. You say, "Tyler Smith began his career as a teacher in the private school of the late Mr. Dermott. The lecture-room was a back kitchen of a house in Bedford-square." I attended Dr. Smith's lectures on Midwifery prior to this time at the Charlotte-street School of Medicine, Bloomsbury, where the dining-room was converted into a lecture-room. The back kitchen was after this date, 1844-5. Dermott moved from Charlotte-street to Bedford-square in 1846 or 1847.

Yours truly,

Stepney-green, June 10th, 1873. EDMUND SNELL, L.R.C.P., &c.

F. C. CALVERT AND CO.'S CARBOLIC VAPORISER.

THIS apparatus is designed as a means of diffusing the vapours of carbolic acid, and so purifying the atmosphere in hospital wards, sick-rooms, infected houses, stables, cow-sheds, &c. It is portable, extremely simple in construction, and easy to use. A flat piece of iron is heated and placed in a chamber, having an enamelled dish above it. Into this dish a small quantity of carbolic acid is poured, when its vapour is at once given off, half an ounce of carbolic acid being sufficient to fumigate an ordinary-sized room. Plain directions for use accompany each vaporiser. The price is 15s.

Mr. W. P. Teevan.—The paper was duly received.

CURIOUS MONSTROSITY.

DR. T. O. REYNOLDS, of Kingston, New Hampshire, records in the *American Clinic*, a case of miscarriage at four months, in which there were two fœtuses expelled, one in the mouth of the other, its head in the pharynx, its left arm protruding through the left nostril, and its legs hanging out. There was but one placenta, connected with the larger fœtus.

An Irish Surgeon.—We have omitted the publication of our correspondent's communication entirely out of consideration to the cause he desires to aid. Sensational and impulsive effusions fail to effect any good. Everything is to be gained by a clear statement of facts, and the adoption of a plain sensible style of writing.

Mr. Pridgin Teale's (Leeds) paper on Ovariotomy shall appear among the original communications next week.

Radius.—We agree with the medical opinion expressed, and with the verdict given.

X. Y. Z., (Plymouth.)—The subject is under discussion.

VIVISECTION IN EDINBURGH.

A FEW days ago the following advertisement appeared in the *Scotsman*:—

"Dogs and cats (few useless) wanted. Any kind of breed will suit.—Apply at the Physiological Laboratory, University, between 10 and 11 A.M."

EPSOM COLLEGE.

THE Governors of this admirable institution, as well as the subscribers to it, are always in the position of having fewer Scholarships to bestow than applications to decline, and they must accordingly be guided by the strictest adhesion to the principle—*detur digniori*. It is not often, we venture to think, that a claim so peculiarly urgent is addressed to them as that of the youngest son of the late Mr. J. D. Baker, Surgeon, of Wragby, Lincolnshire. That gentleman, after twenty years' active professional duty, was thrown from his horse while making his round of visits on the 19th February last, and leaves a widow and three children slenderly provided for. Of these, the youngest, Charles Frederick Baker, is a candidate for election to the College in May, 1874, and we hope that all who have it in their power will exert their vote and interest in his behalf. Proxies will be received by the Rev. W. Knox Marshall, The Vicarage, Wragby, or by Mrs. Baker, Wragby, Lincolnshire.

THE NEW ARMY MEDICAL WARRANT.

To the Editor of THE LANCET.

SIR,—If Mr. Cardwell's memoranda, published in your issue of May 24th, are to be accepted as satisfactory, it necessarily follows that all the letters and leaders which have so complained of the late Warrant have been written to no purpose. Mr. Cardwell confirms the Warrant. Our complaints are, therefore, groundless; we expressed our opinions in ignorance. As I, for one, refuse to accept this view of the case, I can only look on Mr. Cardwell's explanations as a mere political evasion, a temporary make-shift reply to Dr. Lyon Playfair. I ask you and your readers to bear in mind the following important facts. You can verify them by consulting Hart's Army List for 1873. Four existing Inspector-Generals were promoted after an average of ten years' service as assistant-surgeon, and the remaining six after eleven years. The thirty-three Deputy-Inspectors received their promotion having served as assistant-surgeons a period averaging under eleven years. The hundred surgeon-majors in the list received their promotion having served as assistants on an average *less than eight years*; and the seventy-six senior surgeons served an average of *ten* years only as assistants, none longer than *twelve* years. In view of such facts, an assistant-surgeon asks, Why should I not be promoted as soon as I have completed twelve years' service? It is very much more difficult to live now than it was in the days when those gentlemen were promoted. I was obliged to take out a double qualification in medicine and in surgery before I was allowed to present myself at a competitive examination, at which I acquitted myself creditably. I underwent a further competitive examination after a course of special study before I was gazetted an assistant-surgeon. When I joined the service I fully expected my promotion after twelve years' service. I have now served several years abroad, have undergone the perils of climate and disease, and have survived whilst many have been struck down. I have performed my duties satisfactorily. I have endured the annoyances and losses of frequent moves. I have been obliged to submit for twelve years to the orders of men of whom I will only say that some of them were not better fitted to command than myself. Why not promote me as you do the Indian medical officer, and as you have promoted hundreds of men in my department? I am willing and able to work for the benefit of the soldier and the service, and I am five-and-thirty years of age.

To which, Mr. C.—Your arguments, Sir, are not worth the paper they are written on. Far from promoting you in *twelve* years, you shall not be promoted for *fifteen* years, and then I will not guarantee it to you; and if you should not be promoted then, you will have no more pay than you get at ten years, although you certainly were led to believe you would; and, further, when you are promoted, you will not be allowed forage as surgeons hitherto have been by the authority of a Royal Warrant, unless indeed it is absolutely necessary, because you could not perform your various duties on foot; but your ability in this respect will not be left to your judgment. Controllers are appointed over you. You will also be subjected to various minor annoyances which you do not expect; and, lastly, a considerable addition will be made to your present work. You will be obliged to undertake duties and responsibilities of a totally unprofessional nature, without any additional remuneration. It is no matter about your being a professional man. Professional men should know a little of everything, and we intend to make the fullest use of them; and if you have not the knowledge necessary, you must only learn. There is no use in grumbling or complaining, or making any kind of remonstrance or appeal. You may threaten to stop the supply; but until it *is* stopped, you will and must submit to any imposition I think fit and proper. We have not the high opinion of your usefulness that you have yourself; in fact, some of us think we could get on very well without you. You may be thankful if you are promoted in fifteen years and at five-and-thirty years of age.

Assistant-Surgeon.—What is the nature of the additional duties you mention?

Mr. C.—You will be responsible, *in addition* (see Warrant) to your present duties, for all those laid down in the Circular regarding army hospitals.

Assistant-Surgeon.—But surely you will increase my pay if you impose all this!

Mr. C.—I will not do anything of the sort; quite the contrary.

Assistant-Surgeon.—I think you might at least give me half the pay of the officers whom you have hitherto employed doing such work.

Mr. C.—I will not.

Assistant-Surgeon.—I do not understand such work. I am a physician and a surgeon.

Mr. C.—You must learn.

Assistant-Surgeon.—I fear much that my anxiety will materially interfere with my patients' welfare.

Mr. C.—It will not.

Assistant-Surgeon.—Do you expect me to be of as much service to the State under such circumstances as I would be if I felt that my exertions were adequately rewarded, if I had no feeling of disappointment, if I had no reason to regret having entered the service, if I had no annoyances, if I was perfectly contented and happy?

Mr. C.—Most certainly.

Assistant-Surgeon.—There is something wrong somewhere. Farewell.

I remain, Sir, yours truly,

June, 1873. VIGILANCE.

*** Want of space compels us to defer the publication of other communications on the above subject.—ED. L.

THE GRIEVANCES OF ARMY MEDICAL OFFICERS.

We have received several communications from medical officers on the subject of forage and other grievances, and our advice to them is this: They should embody their statements in an official communication to the War Office through the legitimate channel, taking care that all such communications set forth the grounds of grievance in clear, temperate, and respectful language. Mr. Cardwell has invited medical officers individually to make known their grievances. By all means let them do so. If our military medical readers will only act in accordance with the spirit of what we have suggested, we may expect with "some degree of confidence" that this new Warrant will prove, as we said long ago, the harbinger of better things. Should the present Government not redress the evils complained of, it must be remembered that Governments do not last for ever and their successors in office will be compelled, if the profession be true to itself, to reconstruct and amend existing regulations.

Quærens, (Paris.)—The manual of Mr. Archibald Maclaren, gymnasiarch at Oxford, is a good one. It is published by Macmillan and Co. Italian literature, by the way, is rich in such books.

Mr. Farnage, (Southampton.)—We cannot forward private answers. Let our correspondent take the advice of his usual medical attendant in the matter.

INJECTION OF IODINE IN FISTULA.

To the Editor of THE LANCET.

SIR,—Some months ago, among your "Foreign Gleanings," appeared a paragraph on the cure of fistula by injecting with a solution of iodine in ether. I would be glad to know if any of your correspondents have tried this method, how frequently used, what strength of solution, and with what result? I am, Sir, yours, &c.,

June, 1873. J. G.

Student.—A pamphlet of the kind, called "Motor Nerves of the Muscles," was published some years back by Dr. Hughes, but is probably out of print.

Rufus.—We are reluctantly compelled to defer the insertion of our correspondent's communication this week, but it shall appear in our next, and in the meantime we will institute some inquiries into what appears to be an unjust ruling.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Humphry, Cambridge; Mr. T. Holmes, London; Mr. Jonathan Hutchinson, London; Mr. Graham, Walton; Mr. Hunt, London; Dr. Alexander, Liverpool; Mrs. Johnson, Bayswater; Mr. Rose, Monaghan; Mr. Coates, Salisbury; Dr. Ellis, Morley; Mr. Brown, Derby; Mr. Tyler Smith, London; Mr. Clapham, Sheffield; Mr. Satchell, Tunbridge Wells; Mr. Buchanan, Lismamallard; Mr. Inman, Surry; Mr. Newsom, Burnham; Mr. Hobley, Southampton; Mr. Steward, Wellington; Mr. Teale, Leeds; Mr. Powell; Mr. Philpots, Poole; Mr. Colmore, Ipswich; Miss Vaughan, Keynsham; Mr. Wilson, Boston; Mr. James, Llangollen; Mr. Forde, Whetstone; Dr. Cheadle, London; Mr. Farley, Oakham; Mr. W. Akerman, London; Mr. Craven, Bursiem; Mr. Hine, Foot's Cray; Mr. Woodley, Leicester; Dr. Westropp, Lisdoonvarna; Mr. Cox, Bruton; Mr. Lowsley, Reading; Mr. Lobran, Edinburgh; Mr. Penn, London; Dr. Fox, Scarborough; Dr. D. Hooper, London; Mr. Lloyd, Lambeth; Dr. Maclaren, Ylolio; Mr. Young, Salisbury; Dr. Maccall, Lancaster; Mr. Durley, Winchester; Dr. Williams, Llandovery; Mr. Gover, Leeds; Mr. Taylor, Richmond; Mr. Hinton, Wigan; Mr. Harley, Bangor; Mr. Robinson, Ballieborough; Dr. Hilliard, Holloway; Mr. Courtney, Staines; Mr. Palmer, Nayland; Mr. Weller, Bradford; Mr. Reece, Rochester; Mr. Walton, Chelmsford; Mr. Chambers, Helston; Mr. Grant, London; Mr. Snell; Mr. Fitzgerald, Newtown Butler; Mr. Garnham, Southampton; Mr. Edwards, Barton; Dr. Orange, Wokingham; Mr. Billing, Bowden; Mr. R. Alfred, Stirling; Mr. Stuart, Broadstairs; Mr. Prince, Redhill; Mr. Greening, Bromsgrove; Mr. Gale, Wrexham; Mr. Barford, Torquay; Mr. Chambers, Folkestone; Mr. E. Cockburn, Lincoln; Mr. Groves, London; Mr. Wright, Worksop; Mr. Hill, Towcester; Mr. Archer, Oldham; Mr. E. J. Lloyd, Carmarthen; Dr. Burton, Ruabon; Mr. Howard, Tynemouth; Mr. Wharton, Caterham; Mr. Nash, Birmingham; Mr. Thorne, Olney; Mr. Garrett, Darlington; Mr. Godfrey, London; Mr. Davey, Northwoods; Mr. G. Robertson, Melbourne; Mr. Thurman, Wisbeach; Mr. Maxwell, Carnarvon; Mr. Powell, Kilburn; Mr. E. Dalby, Kidderminster; Dr. Livingstone, Stanhope; Mr. Eyre, Bristol; Mr. Ryley, Grantham; Mr. T. Bowles, Portsmouth; Dr. O. Will, Aberdeen; Mr. R. Thornton, Bromley; Mr. Smith, Derby; Mr. Edwards, Ipswich; Mr. Hardesty, Galashiels; Mr. J. W. Heathcote, Shrewsbury; Mr. Nix, Hull; Mr. Bellamy, London; Dr. Ellis, London; Dr. Dowse, Highgate; Mr. Minton, Burnley; Mr. Nursey, Sunderland; Dr. Gairdner, Glasgow; Mr. St. George, Dover; Mr. Taylor, Malton; Mr. Benham, Sleaford; Mr. Morris, Frampton-on-Severn; Mr. Duncan, Chatham; Mr. Trevan, London; Messrs. Harvey and Reynolds, Leeds; Mr. White, London; Mr. Curling, Aberdeen; Mr. Lawson, Huddersfield; Mr. Stanigar, Glasgow; The President of the Royal Institute of British Artists; B. W. Y. X.; A Cavalry Surgeon, India; Radius; Student; Constant Reader; Medical Student; Chirurgus; H.; Young and Grey; E.; A Candidate; J. G.; M.R.C.S.; One of the Disgusted; Æsculapius; A. W. T., Bromley; Anti-Humbug, London; Aleph; &c. &c.

Western Mail, Downpatrick Recorder, Rochdale Observer, Sheffield Independent, Poor-Law Guardian, Tavistock Gazette, Mansfield Advertiser, Kidderminster Shuttle, Madras Monthly Journal, Darlington Times, Indian Medical Gazette, Western Mail, Dover Chronicle, and *Colonial Standard* have been received.

METEOROLOGICAL READINGS

(*Taken by Steward's Instruments*).

THE LANCET OFFICE, JUNE 12TH, 1873.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
June 6	29·06	N.E.	52	54	64	58	42	...	Overcast
„ 7	30·29	E.	45	53	99	70	44	...	Overcast
„ 9	30·15	W S W	53	56	109	72	50	...	Overcast
„ 10	29·85	W N W	53	56	73	62	52	0·05	Overcast
„ 11	29·76	W N W	53	56	92	65	53	...	Fine
„ 12	29·64	E.S.E.	49	56	105	68	44	...	Overcast

Medical Diary of the Week.

Monday, June 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. T. Holmes, "On the Surgical Treatment of Aneurism in its various forms."

Tuesday, June 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, June 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. T. Holmes, "On the Surgical Treatment of Aneurism in its various forms."

Thursday, June 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, June 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. T. Holmes, "On the Surgical Treatment of Aneurism in its various forms."
MEDICAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. James Hogg, "On the Pathological Relations of Diphtheria and Croup."

Saturday, June 21.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 2½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 3 P.M.

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.